

# **NOTIFICATION OF ADDENDUM**

## **ADDENDUM NO. 1**

**DATED 7/01/2013**

<b>Control</b>	<b>0028-14-109, ETC.</b>
<b>Project</b>	<b>BR 2013(226), ETC.</b>
<b>Highway</b>	<b>IH 10</b>
<b>County</b>	<b>ORANGE</b>

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an addendum notification which details the changes and the respective proposal pages which were added and/or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: BR 2013(226)

CONTROL: 0028-14-109

COUNTY: ORANGE

LETTING: 07/10/2013

REFERENCE NO: 0628

**PROPOSAL ADDENDUMS**

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\_ PROPOSAL COVER

X BID INSERTS (SH. NO.: 1-3,5-9,11,12,16,19-23,26 OF 27 )

X GENERAL NOTES (SH. NO.: L )

X SPEC LIST (SH. NO.: 4 OF 5 )

X SPECIAL PROVISIONS:

ADDED: 008---086, 361---001

DELETED:

\_ SPECIAL SPECIFICATIONS:

ADDED:

DELETED:

X OTHER: PLAN SHEETS

DESCRIPTION OF ABOVE CHANGES

(INCLUDING PLANS SHEET CHANGES)

BID INSERTS-

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REVISED QUANTITY FOR THE FOLLOWING BID ITEMS:

310-2002, 403-2001, 423-2001, 423-2009, 432-2001, 432-2040, 432-2048,  
462-2001, 462-2006, 462-2007, 464-2005, 465-2003, 465-2005, 465-2154,  
465-2155, 465-2304, 467-2211, 467-2224, 467-2236, 467-2288, 508-2012,  
530-2010, 636-2001, 636-2003, 662-2056, 662-2064, 662-2066, 662-2067,  
662-2075, 662-2099, 666-2189, 666-2191, 666-2193, 672-2010, 672-2017,  
678-2001, 678-2003, 678-2004, 4562-2002

ADDED THE FOLLOWING BID ITEMS:

100-2001, 168-2001, 216-2001, 247-2041, 361-2008, 368-2004, 464-2007,  
465-2119, 465-2161, 465-2198, 465-2199, 465-2200, 465-2279, 465-2757,  
466-2020, 466-2048, 466-2129, 467-2023, 467-2038, 467-2172, 467-2183,  
476-2012, 476-2018, 666-2002, 666-2005, 666-2011, 666-2029, 666-2035,  
666-2041, 666-2104, 666-2110, 666-2246, 666-2379, 668-2105, 668-2106,  
668-2107, 668-2112, 668-2116, 668-2118, 668-2128

DELETED THE FOLLOWING BID ITEMS:

100-2009, 247-2045, 368-2002, 464-2010, 465-2016, 466-2005, 466-2049,  
467-2452, 476-2017, 530-2004, 666-2003, 666-2006, 666-2012, 666-2030,  
666-2036, 666-2042, 666-2105, 666-2111, 666-2247, 666-2380, 668-2020,

DESCRIPTION OF ABOVE CHANGES

(CONTINUED)

(INCLUDING PLANS SHEET CHANGES)

668-2021, 668-2022, 668-2027, 668-2031, 668-2033, 668-2043  
BID INSERT SHEETS 1-3,5-9,11,12,16,19-23,26 OF 27 CHANGED AS A RESULT

GENERAL NOTES-  
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SHEET L, ITEM 545: ADDED ANOTHER CRASH CUSHION ATTENUATOR TO LIST

SPEC LIST-  
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ADDED SPECIAL PROVISIONS 008---086 AND 361---001  
SPEC LIST SHEET 4 OF 5 CHANGED AS A RESULT

PLAN SHEETS-  
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SHEETS 2,3: REVISED INDEX TO INCLUDE NEW SHEETS  
SHEET 5: CORRECTED STATION ON PROJECT LAYOUT  
SHEET 15: MODIFIED TO INCLUDE WEAVE LANE ACROSS ADAMS BAYOU BRIDGE  
SHEET 32E: REVISED ITEM 545 NOTES AS INDICATED ABOVE  
SHEETS 33,33A-33F: REVISED E&Q SHEETS TO REFLECT QUANTITY CHANGES ABOVE  
SHEET 34: REVISED ITEM 403, 508, AND 662 QUANTITIES  
SHEET 35: REVISED DETOUR DESCRIPTION AND QUANTITY  
SHEET 35A: ADDED EARTHWORK QUANTITIES FOR DETOURS  
SHEET 36: CHANGED PREP ROW TO BE PAID BY THE ACRE  
SHEET 37: CHANGED QUANTITIES FOR PRIME COAT  
SHEET 38: CHANGED FROM ANCHOR LUG TO TERMINAL ANCHOR JOINT  
SHEET 44: REMOVED INTERSECTION (CONC) AND ADDED QUANTITIES TO DRIVEWAYS  
SHEET 45: ADDED PROOF ROLLING ITEM, CHANGED FLEX BASE TO TY A  
SHEETS 46,47,47A: REVISED DRAINAGE QUANTITIES  
SHEETS 48-49: CHANGED 666 ITEMS TO 90MIL; CHANGED 668 ITEMS TO TY C;  
UPDATED QUANTITIES  
SHEETS 53A,53B: ADDED SMALL SIGN SUMMARY SHEETS  
SHEETS 54-56: REVISED LARGE SIGN QUANTITIES  
SHEET 75: RETRACTED NOTE  
SHEET 77A: ADDED TCP SHEET  
SHEET 78: REVISED DIMENSIONS TO MORE ACCURATELY REPRESENT CONDITION  
SHEET 83: ADDED DIMENSIONS FOR CONTRACTOR'S INFORMATION  
SHEETS 107-108: REVISED TCP STRIPING PLAN FOR WB LANES  
SHEETS 113-114: REVISED CALLOUTS; ADDED NOTE  
SHEETS 115-118: ADDED NOTE  
SHEET 121: REVISED LANE SHIFT AND CALLOUTS  
SHEET 134: REVISED ALIGNMENT CALLOUT; ADDED ALIGNMENT INFO, CULVERT, AND  
CULVERT CALLOUT  
SHEETS 135-136: ADDED ALIGNMENT INFORMATION  
SHEET 137: REVISED ALIGNMENT CALLOUT; ADDED ALIGNMENT INFO, CULVERT, AND  
CULVERT CALLOUT  
SHEETS 143-144: ADDED NOTES FOR DRAINAGE STRUCTURE REFERENCES  
SHEET 145: CORRECTED STATION CALLOUTS  
SHEET 156: REVISED CULVERT AND CALLOUT  
SHEET 159: ADDED CULVERT AND CALLOUT  
SHEET 161: REVISED CONSTRUCTION AREA AND REFERENCE POINTS; ADDED AREA OF  
CONSTRUCTION  
SHEET 162: REVISED AREA OF CONSTRUCTION  
SHEETS 165-166: ADDED CULVERTS AND CALLOUTS

SHEET 172: CORRECTED TRENCH DRAIN CALLOUTS  
DESCRIPTION OF ABOVE CHANGES  
(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

SHEET 177: ADDED CULVERT AND CALLOUT  
SHEET 178: REVISED AND ADDED STRIPING CALLOUTS  
SHEET 179: REVISED AND ADDED STRIPING CALLOUTS; REVISED MBGF CONSTRUCTION  
AREA AND CALLOUTS  
SHEET 180: REVISED STRIPING CALLOUT; ADDED CULVERT AND CALLOUT  
SHEET 182: REVISED PERMANENT PAVEMENT AREA, STRIPING, AND CALLOUTS; ADDED  
PERMANENT PAVEMENT AREA AND STRIPING CALLOUTS  
SHEET 183: REVISED PERMANENT PAVEMENT AREA, STRIPING, AND CALLOUTS; ADDED  
SIGN  
SHEETS 186,187,199,202: ADDED CULVERTS AND CALLOUTS  
SHEETS 204,205: REVISED AND ADDED PERMANENT PAVEMENT AREA  
SHEET 208: ADDED CULVERT AND CALLOUT  
SHEET 209: ADDED CULVERT CALLOUTS; REDUCED DETOUR  
SHEET 220: ADDED CULVERT AND CALLOUT  
SHEET 223: REVISED CULVERT AND CALLOUT  
SHEETS 225,226: REVISED AND ADDED PERMANENT PAVEMENT AREA  
SHEET 229: ADDED CULVERT AND CALLOUT; ADDED STRIPING CALLOUTS; ADDED  
EXISTING PAVEMENT MARKINGS FROM PREVIOUS PHASE TO WB FRONTAGE ROAD  
SHEET 230: REVISED AND ADDED STRIPING CALLOUTS; ADDED CULVERTS AND  
CALLOUTS; ADDED EXTENSION OF RETAINING WALL AND CALLOUT  
SHEETS 250,253: ADDED CULVERTS AND CALLOUTS  
SHEET 256: REVISED PERMANENT PAVEMENT AREA AND STRIPING CALLOUTS  
SHEETS 259,260,271: ADDED CULVERTS AND CALLOUTS  
SHEET 272: REVISED AND ADDED STRIPING CALLOUTS; ADDED MBGF CONSTRUCTION  
CALLOUTS  
SHEET 273: REVISED AND ADDED STRIPING CALLOUTS  
SHEET 274: ADDED CULVERT AND CALLOUT; ADDED STRIPING CALLOUT  
SHEET 277: REVISED PERMANENT PAVEMENT AREA  
SHEETS 280,281: ADDED CULVERTS AND CALLOUTS  
SHEET 314: CORRECTED STRIPING CALLOUT  
SHEETS 324,333: REVISED NOTE TO CHANGE TEMPORARY SHORING TO A PAY ITEM  
SHEET 355A: ADDED TCP STANDARD SHEET  
SHEET 386A: ADDED CRASH CUSHION STANDARD SHEET  
SHEET 396: MODIFIED WBFR2 ALIGNMENT  
SHEETS 414,415,419: ADDED PREP ROW TO BE PAID BY THE ACRE  
SHEET 428: DISPLAYED CULVERT IN PROFILE VIEW  
SHEETS 429,430: ADJUSTED LANE LINES TO INCLUDE WEAVE LANE ACROSS ADAMS  
BAYOU BRIDGE  
SHEET 431: DISPLAYED CULVERT IN PROFILE VIEW  
SHEETS 433-435: ADDED TERMINAL ANCHOR JOINT  
SHEETS 437,438: DISPLAYED CULVERT IN PLAN VIEW  
SHEETS 439,440: ADDED TERMINAL ANCHOR JOINT  
SHEETS 441,443: ADDED NOTE  
SHEETS 451-453: MODIFIED WBFR2 PLAN AND PROFILE  
SHEETS 465,466: MODIFIED RAMP 6 PLAN AND PROFILE  
SHEET 487: ADDED DETAILS FOR INTERSECTING STREET  
SHEET 495C: ADDED FAST TRACK PAVING DETAILS SHEET  
SHEET 514: ADDED TERMINAL ANCHOR JOINT STANDARD; REMOVED ANCHOR LUG  
STANDARD SHEET  
SHEETS 522,524: UPDATED TYPICAL SECTION

SHEET 535: UPDATED WALL GEOMETRY AND QUANTITIES  
SHEET 537: CORRECTED QUANTITIES FOR MSE AND SOIL NAIL RETAINING WALL  
SHEET 548R: REVISED STEP 5  
SHEET 603: REVISED DRAINAGE LATERALS  
DESCRIPTION OF ABOVE CHANGES (CONTINUED)  
(INCLUDING PLANS SHEET CHANGES)

SHEETS 607-610: REVISED DRAINAGE PLAN  
SHEETS 615A,616-619,621: REVISED DRAINAGE PROFILES  
SHEETS 622-624: REVISED CALLOUTS ON CULVERT LAYOUTS  
SHEETS 629,631: CORRECTED SHEET SCALE  
SHEET 661: REVISED X-SECTION B-B  
SHEET 663: REVISED X-SECTION B-B  
SHEETS 666-668: CORRECTED DIMENSION ERRORS  
SHEET 670A: ADDED MISC. DRAINAGE DETAILS SHEET  
SHEET 699: REVISED BCS SHEET  
SHEETS 913-916: UPDATED STRIPING FOR WEAVE LANE AT ADAMS BAYOU  
SHEETS 918,919: UPDATED TURNAROUND STRIPING  
SHEETS 936,937: UPDATED SIGNING FOR WEAVE LANE AT ADAMS BAYOU  
SHEETS 939-942: REVISED OVERHEAD SIGNS  
SHEETS 963A,963B: ADDED DISTRICT STANDARDS RSSD-13 AND PM(CSLL)-13  
SHEETS 995-999: REVISED SIGNAL POLE LOCATION, RAMPS, MAST ARM LENGTHS  
AND LUMINAIRES  
SHEET 1002: REVISED QUANTITIES  
SHEETS 1003,1008,1017,1018: ADDED ENGINEER'S SEAL

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	2001	002	PREPARING ROW DOLLARS and CENTS	AC	19.300	1
	104	2001		REMOVING CONC (PAV) DOLLARS and CENTS	SY	76,359.000	2
	104	2009		REMOVING CONC (RIPRAP) DOLLARS and CENTS	SY	512.000	3
	104	2015		REMOVING CONC (SIDEWALKS) DOLLARS and CENTS	SY	523.000	4
	104	2017		REMOVING CONC (DRIVEWAYS) DOLLARS and CENTS	SY	2,530.000	5
	104	2023		REMOVING CONC (CTB) DOLLARS and CENTS	LF	915.000	6
	105	2013		REMOVING STAB BASE & ASPH PAV (9") DOLLARS and CENTS	SY	9,113.000	7
	105	2020		REMOVING STAB BASE & ASPH PAV (12") DOLLARS and CENTS	SY	6,945.000	8
	105	2026		REMOVE STAB BASE & ASPH PAV (13"-18") DOLLARS and CENTS	SY	32,529.000	9
	105	2029		REMOVE STAB BASE & ASPH PAV (24") DOLLARS and CENTS	SY	9,904.000	10
	110	2001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	55,604.000	11

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	132	2002		EMBANKMENT (FINAL)(DENS CONT)(TY A) DOLLARS and CENTS	CY	160,194.000	12
	132	2004		EMBANKMENT (FINAL)(DENS CONT)(TY B) DOLLARS and CENTS	CY	470,515.000	13
	160	2003		FURNISHING AND PLACING TOPSOIL (4") DOLLARS and CENTS	SY	217,474.000	14
	164	2022	002	CELL FBR MLCH SEED(PERM)(RURAL)(SANDY) DOLLARS and CENTS	AC	44.930	15
	164	2030	002	CELL FBR MLCH SEED(TEMP)(WARM) DOLLARS and CENTS	AC	22.470	16
	164	2032	002	CELL FBR MLCH SEED(TEMP)(COOL) DOLLARS and CENTS	AC	22.470	17
	168	2001		VEGETATIVE WATERING DOLLARS and CENTS	MG	306.000	18
	216	2001		PROOF ROLLING DOLLARS and CENTS	HR	4.000	19
	247	2041	033	FL BS (CMP IN PLC)(TY A GR 1)(FNAL POS) DOLLARS and CENTS	CY	4,384.000	20
	260	2006	003	LIME TRT (EXST MATL) (6") DOLLARS and CENTS	SY	152,449.000	21

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	260	2012	003	LIME(HYD,COM OR QK)(SLRY)OR QK(DRY) DOLLARS and CENTS	TON	2,278.000	22
	276	2169		CEM TRT(PLNT MX) (CL L)(TY A)(GR 1)(6") DOLLARS and CENTS	SY	312,658.000	23
	292	2017		ASPHALT STAB BASE (GR 4)(PG 64) DOLLARS and CENTS	TON	13,961.000	24
	305	2002		SALV, HAUL & STKPL RCL APH PV (0 TO 2") DOLLARS and CENTS	SY	61,104.000	25
	305	2006		SLV, HAUL & STKPL RCL APH PV (8 TO 10") DOLLARS and CENTS	SY	48,808.000	26
	305	2032		SALV HAUL & STKPL RCL APH PV (6") DOLLARS and CENTS	SY	9,904.000	27
	310	2002		PRIME COAT (AE-P) DOLLARS and CENTS	GAL	63,390.000	28
	360	2002	003	CONC PVMT (CONT REINF-CRCP)(9") DOLLARS and CENTS	SY	56,629.000	29
	360	2008	003	CONC PVMT (CONT REINF-CRCP)(15") DOLLARS and CENTS	SY	197,263.000	30
	361	2008	001	FULL-DEPTH REPAIR CRCP (15") DOLLARS and CENTS	SY	160.000	31
	368	2004		TERMINAL ANCHOR JOINT CONT REINF DOLLARS and CENTS	CY	385.720	32



ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	402	2001		TRENCH EXCAVATION PROTECTION DOLLARS and CENTS	LF	1,287.000	33
	403	2001		TEMPORARY SPL SHORING DOLLARS and CENTS	SF	157,294.000	34
	403	2010		TEMPORARY SPL SHORING (COFFERDAM) DOLLARS and CENTS	SF	16,792.000	35
	409	2002		PRESTR CONC PIL (18 IN SQ) DOLLARS and CENTS	LF	41,978.000	36
	416	2015	001	DRILL SHAFT (NON-REINFORCED)(12 IN) DOLLARS and CENTS	LF	49.000	37
	416	2018	001	DRILL SHAFT (SIGN MTS)(24 IN) DOLLARS and CENTS	LF	32.000	38
	416	2020	001	DRILL SHAFT (SIGN MTS)(36 IN) DOLLARS and CENTS	LF	119.000	39
	416	2021	001	DRILL SHAFT (SIGN MTS)(42 IN) DOLLARS and CENTS	LF	52.000	40
	416	2022	001	DRILL SHAFT (SIGN MTS)(48 IN) DOLLARS and CENTS	LF	154.330	41
	416	2023	001	DRILL SHAFT (SIGN MTS)(54 IN) DOLLARS and CENTS	LF	45.000	42
	416	2026	001	DRILL SHAFT (HIGH MAST POLE)(60 IN) DOLLARS and CENTS	LF	495.000	43

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	416	2029	001	DRILL SHAFT (RDWY ILL POLE) (30 IN) DOLLARS and CENTS	LF	192.000	44
	416	2032	001	DRILL SHAFT (TRF SIG POLE) (36 IN) DOLLARS and CENTS	LF	24.000	45
	416	2034	001	DRILL SHAFT (TRF SIG POLE) (48 IN) DOLLARS and CENTS	LF	88.000	46
	420	2003	002	CL C CONC (ABUT) DOLLARS and CENTS	CY	554.900	47
	420	2004	002	CL C CONC (BENT) DOLLARS and CENTS	CY	1,282.200	48
	420	2005	002	CL C CONC (FOOTING) DOLLARS and CENTS	CY	250.200	49
	420	2019	002	CL C CONC (CAP) DOLLARS and CENTS	CY	226.900	50
	420	2020	002	CL C CONC (CRASHWALL) DOLLARS and CENTS	CY	242.400	51
	420	2022	002	CL E CONC (SEAL) DOLLARS and CENTS	CY	192.000	52
	420	2033	002	CL S CONC (APPR SLAB) DOLLARS and CENTS	CY	1,114.600	53
	420	2123	002	CL C CONC (FOOTING) (HPC) DOLLARS and CENTS	CY	288.000	54

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	ITEM NO	DESC CODE	S.P. NO.				
	420	2223	002	CL C CONC (COLUMN)(HPC)  DOLLARS CENTS and	CY	131.800	55
	422	2001		REINF CONC SLAB  DOLLARS CENTS and	SF	211,095.000	56
	423	2001		RETAINING WALL (MSE)  DOLLARS CENTS and	SF	121,920.000	57
	423	2009		RETAINING WALL (SOIL NAILED)(FACIA)  DOLLARS CENTS and	SF	16,694.000	58
	425	2065	001	PRESTR CONC GIRDER (TX34)  DOLLARS CENTS and	LF	4,962.140	59
	425	2067	001	PRESTR CONC GIRDER (TX46)  DOLLARS CENTS and	LF	7,519.070	60
	425	2068	001	PRESTR CONC GIRDER (TX54)  DOLLARS CENTS and	LF	2,289.160	61
	425	2069	001	PRESTR CONC GIRDER (TX62)  DOLLARS CENTS and	LF	11,374.260	62
	427	2002		CONCRETE PAINT FINISH  DOLLARS CENTS and	SF	119,737.000	63
	429	2009	008	CNC STR REP (BRDG DECK)(PARTIAL DEPTH)  DOLLARS CENTS and	SF	2,210.000	64
	432	2001		RIPRAP (CONC)(4 IN)  DOLLARS CENTS and	CY	2,044.860	65

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	432	2002		RIPRAP (CONC)(5 IN) DOLLARS and CENTS	CY	482.900	66
	432	2040		RIPRAP (MOW STRIP)(5 IN) DOLLARS and CENTS	CY	248.700	67
	432	2048		RIPRAP (CONC)(FLUME) DOLLARS and CENTS	CY	148.900	68
	442	2048		STRUCTURAL STEEL(MISC NON-BRIDGE) DOLLARS and CENTS	LB	444.000	69
	450	2013	001	RAIL (TY SSTR) DOLLARS and CENTS	LF	14,139.000	70
	450	2062	001	RAIL (TY SSCB) DOLLARS and CENTS	LF	2,031.000	71
	450	2109	001	RAIL (TY SSTR) W/DRAIN SLOTS DOLLARS and CENTS	LF	3,341.000	72
	454	2006	003	HEADER TYPE EXPANSION JOINT DOLLARS and CENTS	LF	465.000	73
	454	2009	003	SEALED EXPANSION JOINT (5 IN)(SEJ-A) DOLLARS and CENTS	LF	848.000	74
	462	2001	015	CONC BOX CULV (3 FT X 2 FT) DOLLARS and CENTS	LF	696.000	75
	462	2006	015	CONC BOX CULV (5 FT X 2 FT) DOLLARS and CENTS	LF	1,834.400	76

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	462	2007	015	CONC BOX CULV (5 FT X 3 FT) DOLLARS and CENTS	LF	188.000	77
	462	2016	015	CONC BOX CULV (7 FT X 5 FT) DOLLARS and CENTS	LF	600.000	78
	464	2005	006	RC PIPE (CL III)(24 IN) DOLLARS and CENTS	LF	16,674.000	79
	464	2007	006	RC PIPE (CL III)(30 IN) DOLLARS and CENTS	LF	98.000	80
	464	2009	006	RC PIPE (CL III)(36 IN) DOLLARS and CENTS	LF	86.000	81
	464	2011	006	RC PIPE (CL III)(48 IN) DOLLARS and CENTS	LF	162.000	82
	465	2003	001	INLET (COMPL)(TY H) DOLLARS and CENTS	EA	19.000	83
	465	2005	001	MANH (COMPL)(TY M) DOLLARS and CENTS	EA	3.000	84
	465	2119	001	INLET (COMPL)(TY AZ) DOLLARS and CENTS	EA	37.000	85
	465	2154	001	INLET (COMPL)(TY C)(5') DOLLARS and CENTS	EA	22.000	86
	465	2155	001	INLET (COMPL)(TY C)(10') DOLLARS and CENTS	EA	10.000	87

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	465	2161	001	INLET (COMPL)(TY H)(MOD) DOLLARS and CENTS	EA	5.000	88
	465	2198	001	INLET (COMPL)(TY AZ)(MOD 1) DOLLARS and CENTS	EA	1.000	89
	465	2199	001	INLET (COMPL)(TY AZ)(MOD 2) DOLLARS and CENTS	EA	11.000	90
	465	2200	001	INLET (COMPL)(TY AZ)(MOD 4) DOLLARS and CENTS	EA	17.000	91
	465	2279	001	INLET (COMPL)(TY AZ)(MOD 3) DOLLARS and CENTS	EA	1.000	92
	465	2304	001	INLET (COMPL)(TY AZ)(2 GRATES) DOLLARS and CENTS	EA	27.000	93
	465	2757	001	JUNCTION BOX (SPL) DOLLARS and CENTS	EA	2.000	94
	466	2020		WINGWALL (FW-0)(HW=4 FT) DOLLARS and CENTS	EA	2.000	95
	466	2048		WINGWALL (PW)(HW=4 FT) DOLLARS and CENTS	EA	2.000	96
	466	2071		HEADWALL (CH-FW-0)(DIA= 48 IN) DOLLARS and CENTS	EA	4.000	97
	466	2129		HEADWALL (CH-PW-0)(DIA= 36 IN) DOLLARS and CENTS	EA	1.000	98

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	467	2023		SET (TY I)(S= 3 FT)(HW= 3 FT)(3:1)(C) DOLLARS and CENTS	EA	2.000	99
	467	2038		SET (TY I)(S= 5 FT)(HW= 3 FT)(3:1)(C) DOLLARS and CENTS	EA	2.000	100
	467	2172		SET (TY I)(S= 3 FT)(HW= 3 FT)(6:1)(P) DOLLARS and CENTS	EA	2.000	101
	467	2183		SET (TY I)(S= 5 FT)(HW= 4 FT)(6:1)(P) DOLLARS and CENTS	EA	1.000	102
	467	2211		SET (TY II)(24 IN)(RCP)(3:1)(C) DOLLARS and CENTS	EA	1.000	103
	467	2224		SET (TY II)(24 IN)(RCP)(4:1)(C) DOLLARS and CENTS	EA	4.000	104
	467	2236		SET (TY II)(24 IN)(RCP)(6:1)(C) DOLLARS and CENTS	EA	4.000	105
	467	2288		SET (TY II)(24 IN)(RCP)(6:1)(P) DOLLARS and CENTS	EA	7.000	106
	474	2001		SLOT DRAIN (GAL STL)(12 IN) DOLLARS and CENTS	LF	800.000	107
	474	2002		SLOT DRAIN OUTFALL (GAL STL)(12 IN) DOLLARS and CENTS	LF	90.000	108
	476	2012	003	JACK BOR OR TUN PIPE(24 IN)(RC)(CL IV) DOLLARS and CENTS	LF	156.000	109

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	476	2018	003	JACK BOR OR TUN PIPE(60 IN)(RC)(CL IV) DOLLARS and CENTS	LF	314.000	110
	476	2079	003	JACK BOR OR TUN PIPE(12 IN)(STL CASING) DOLLARS and CENTS	LF	90.000	111
	481	2013		PVC PIPE (SCH 40)(8 IN) DOLLARS and CENTS	LF	956.000	112
	496	2002		REMOV STR (INLET) DOLLARS and CENTS	EA	17.000	113
	496	2006		REMOV STR (HEADWALL) DOLLARS and CENTS	EA	13.000	114
	496	2007		REMOV STR (PIPE) DOLLARS and CENTS	LF	3,863.000	115
	496	2008		REMOV STR (BOX CULVERT) DOLLARS and CENTS	LF	3,184.000	116
	496	2010		REMOV STR (BRIDGE 100-499 FT LENGTH) DOLLARS and CENTS	EA	4.000	117
	496	2011		REMOV STR (BRIDGE 500-999 FT LENGTH) DOLLARS and CENTS	EA	2.000	118
	496	2025		REMOV STR (APPROACH SLAB) DOLLARS and CENTS	EA	12.000	119
	500	2001	011	MOBILIZATION DOLLARS and CENTS	LS	1.000	120



ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	502	2001	033	BARRICADES, SIGNS AND TRAFFIC HAN- DLING  DOLLARS and CENTS	MO	48.000	121
	508	2011	001	CONSTRUCTING DETOURS (TY A)  DOLLARS and CENTS	SY	9,590.000	122
	508	2012	001	CONSTRUCTING DETOURS (TY B)  DOLLARS and CENTS	SY	25,924.000	123
	508	2013	001	CONSTRUCTING DETOURS (TY C)  DOLLARS and CENTS	SY	7,523.000	124
	512	2008	002	PORT CTB (FUR & INST)(LOW PROF)(TY 1)  DOLLARS and CENTS	LF	1,320.000	125
	512	2009	002	PORT CTB (FUR & INST)(LOW PROF)(TY 2)  DOLLARS and CENTS	LF	120.000	126
	512	2026	002	PORT CTB (MOVE)(LOW PROF)(TY 1)  DOLLARS and CENTS	LF	3,600.000	127
	512	2027	002	PORT CTB (MOVE)(LOW PROF)(TY 2)  DOLLARS and CENTS	LF	420.000	128
	512	2044	002	PORT CTB (REMOVE)(LOW PROF)(TY 1)  DOLLARS and CENTS	LF	1,320.000	129
	512	2045	002	PORT CTB (REMOVE)(LOW PROF)(TY 2)  DOLLARS and CENTS	LF	120.000	130

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	512	2048	002	PORT CTB (FUR & INST)(F-SHAPE)(TY 1) DOLLARS and CENTS	LF	60,720.000	131
	512	2050	002	PORT CTB (MOVE)(F-SHAPE)(TY 1) DOLLARS and CENTS	LF	119,640.000	132
	512	2052	002	PORT CTB (REMOVE)(F-SHAPE)(TY 1) DOLLARS and CENTS	LF	60,780.000	133
	512	2076	002	PCTB(FUR & INST)(F-SHAPE)(TY 1)(MOD) DOLLARS and CENTS	LF	60.000	134
	514	2004	002	PERM CONC TRF BARR (SGL SLP)(TY 1)(42") DOLLARS and CENTS	LF	18,195.000	135
	514	2006	002	PERM CONC TRF BARR (SGL SLP)(TY 3)(42") DOLLARS and CENTS	LF	248.000	136
	529	2002		CONC CURB (TY II) DOLLARS and CENTS	LF	8,902.000	137
	529	2007		CONC CURB (DOWEL) DOLLARS and CENTS	LF	464.000	138
	530	2010	006	DRIVEWAYS (CONC) DOLLARS and CENTS	SY	4,759.000	139
	531	2005		CURB RAMPS (TY 1) DOLLARS and CENTS	EA	8.000	140
	531	2010		CURB RAMPS (TY 7) DOLLARS and CENTS	EA	16.000	141

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	531	2035		CONCRETE SIDEWALKS (5')(4") DOLLARS and CENTS	LF	1,917.000	142
	531	2040		CURB RAMPS (TY 5) DOLLARS and CENTS	EA	1.000	143
	540	2001	031	MTL W-BEAM GD FEN (TIM POST) DOLLARS and CENTS	LF	4,420.000	144
	540	2011	031	MTL BEAM GD FEN TRANS (THRIE-BEAM) DOLLARS and CENTS	EA	18.000	145
	540	2044	031	DOWNSTREAM ANCHOR TERMI- NAL(DAT)SECTION DOLLARS and CENTS	EA	8.000	146
	540	2045	031	MTL BM GD FEN (LONG SPAN SYSTEM) DOLLARS and CENTS	LF	50.000	147
	542	2001		REMOVING METAL BEAM GUARD FENCE DOLLARS and CENTS	LF	3,225.000	148
	542	2002		REMOVING TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	16.000	149
	544	2001		GUARDRAIL END TREATMENT (INSTALL) DOLLARS and CENTS	EA	18.000	150
	544	2003		GUARDRAIL END TREATMENT (REMOVE) DOLLARS and CENTS	EA	16.000	151

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	545	2003		CRASH CUSH ATTEN (REMOVE) DOLLARS and CENTS	EA	1.000	152
	545	2058		CRASH CUSH ATTEN (INSTL) (N) DOLLARS and CENTS	EA	8.000	153
	545	2059		CRASH CUSH ATTEN (MOVE & RESET) (N) DOLLARS and CENTS	EA	38.000	154
	545	2060		CRASH CUSH ATTEN (REMOVE) (N) DOLLARS and CENTS	EA	8.000	155
	545	2061		CRASH CUSH ATTEN (INSTL) (W) DOLLARS and CENTS	EA	2.000	156
	545	2069		CRASH CUSHION ATTEN (MOVE & RESET)(W) DOLLARS and CENTS	EA	1.000	157
	545	2070		CRASH CUSHION ATTEN (REMOVE)(W) DOLLARS and CENTS	EA	2.000	158
	610	2025	015	INS RD IL AM (TY SA) 40T-8 (.25 KW)S DOLLARS and CENTS	EA	24.000	159
	610	2060	015	INS RD IL AM (U/P) (TY 1) (.15KW)S DOLLARS and CENTS	EA	16.000	160
	610	2072	015	REMOVE RDWY ILL ASSEM DOLLARS and CENTS	EA	29.000	161

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	613	2006	002	HI MST IL POLE (150 FT) (100 MPH) DOLLARS and CENTS	EA	11.000	162
	614	2001		HI MST IL ASM(12-400 WATT)(ASYM)(TY A) DOLLARS and CENTS	EA	11.000	163
	618	2018		CONDT (PVC) (SCHD 40) ( 2") DOLLARS and CENTS	LF	16,263.000	164
	618	2022		CONDT (PVC) (SCHD 40) (3") DOLLARS and CENTS	LF	1,460.000	165
	618	2035		CONDT (PVC) (SCHD 80) (2") (BORE) DOLLARS and CENTS	LF	2,080.000	166
	618	2039		CONDT (PVC) (SCHD 80) (3") (BORE) DOLLARS and CENTS	LF	63.000	167
	618	2046		CONDT (RM) (1") DOLLARS and CENTS	LF	1,315.000	168
	620	2003	001	ELEC CONDR (NO. 2) BARE DOLLARS and CENTS	LF	800.000	169
	620	2004	001	ELEC CONDR (NO. 2) INSULATED DOLLARS and CENTS	LF	2,400.000	170
	620	2008	001	ELEC CONDR (NO. 4) INSULATED DOLLARS and CENTS	LF	990.000	171
	620	2011	001	ELEC CONDR (NO. 8) BARE DOLLARS and CENTS	LF	17,910.000	172

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	620	2012	001	ELEC CONDR (NO. 8) INSULATED DOLLARS and CENTS	LF	36,280.000	173
	620	2015	001	ELEC CONDR (NO.12) BARE DOLLARS and CENTS	LF	1,315.000	174
	620	2016	001	ELEC CONDR (NO.12) INSULATED DOLLARS and CENTS	LF	5,088.000	175
	624	2007	014	GROUND BOX TY A (122311) DOLLARS and CENTS	EA	11.000	176
	624	2008	014	GROUND BOX TY A (122311) W/APRON DOLLARS and CENTS	EA	62.000	177
	624	2012	014	GROUND BOX TY C (162911) W/APRON DOLLARS and CENTS	EA	2.000	178
	628	2122	003	ELC SRV TY D 120/240 100 (NS)SS(E)SP(O) DOLLARS and CENTS	EA	1.000	179
	628	2338	003	ELC SRV TY A 240/480 100 (NS)AL(E)SP(U) DOLLARS and CENTS	EA	8.000	180
	636	2001	014	ALUMINUM SIGNS (TY A) DOLLARS and CENTS	SF	365.750	181
	636	2002	014	ALUMINUM SIGNS (TY G) DOLLARS and CENTS	SF	586.250	182
	636	2003	014	ALUMINUM SIGNS (TY O) DOLLARS and CENTS	SF	2,603.500	183

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	644	2001		IN SM RD SN SUP&AM TY10BWG(1)SA(P) DOLLARS and CENTS	EA	64.000	184
	644	2004		IN SM RD SN SUP&AM TY10BWG(1)SA(T) DOLLARS and CENTS	EA	71.000	185
	644	2005		IN SM RD SN SUP&AM TY10BWG(1)SA(T- 2EXT) DOLLARS and CENTS	EA	4.000	186
	644	2022		IN SM RD SN SUP&AM TYS80(1)SA(P) DOLLARS and CENTS	EA	21.000	187
	644	2025		IN SM RD SN SUP&AM TYS80(1)SA(T) DOLLARS and CENTS	EA	10.000	188
	644	2026		IN SM RD SN SUP&AM TYS80(1)SA(T-2EXT) DOLLARS and CENTS	EA	2.000	189
	644	2027		IN SM RD SN SUP&AM TYS80(1)SA(U) DOLLARS and CENTS	EA	2.000	190
	644	2028		IN SM RD SN SUP&AM TYS80(1)SA(U-1EXT) DOLLARS and CENTS	EA	9.000	191
	644	2060		REMOVE SM RD SN SUP & AM DOLLARS and CENTS	EA	161.000	192
	647	2001		INSTALL LRSS (STRUCT STEEL) DOLLARS and CENTS	LB	2,869.900	193

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	647	2003		REMOVE LRSA DOLLARS and CENTS	EA	23.000	194
	650	2040		INS OH SN SUP(40 FT CANT) DOLLARS and CENTS	EA	2.000	195
	650	2078		INS OH SN SUP(75 FT BRDG) DOLLARS and CENTS	EA	1.000	196
	650	2083		INS OH SN SUP(80 FT BRDG) DOLLARS and CENTS	EA	2.000	197
	650	2088		INS OH SN SUP(85 FT BRDG) DOLLARS and CENTS	EA	1.000	198
	650	2165		INS OH SN SUP(170 FT BRDG) DOLLARS and CENTS	EA	2.000	199
	650	2172		RELOCATE EXISTING OVERHD SIGN SUP DOLLARS and CENTS	EA	1.000	200
	658	2240		INSTL DEL ASSM (D-SW)SZ 1(F LX)GF2 DOLLARS and CENTS	EA	59.000	201
	658	2258		INSTL DEL ASSM (D-SW)SZ (TYC)CTB DOLLARS and CENTS	EA	117.000	202
	658	2263		INSTL DEL ASSM (D-SY)SZ 1(F LX)GND DOLLARS and CENTS	EA	44.000	203
	658	2278		INSTL DEL ASSM (D-SY)SZ (TYC)CTB(BI) DOLLARS and CENTS	EA	85.000	204



ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	658	2315		INSTL OM ASSM (OM-2Y)(WC) GND DOLLARS and CENTS	EA	49.000	205
	658	2329		INSTL DEL ASSM (D-SW)SZ 1(FLX)GND DOLLARS and CENTS	EA	130.000	206
	662	2052		WK ZN PAV MRK REMOV (REFL) TY I-C DOLLARS and CENTS	EA	112.000	207
	662	2056		WK ZN PAV MRK REMOV (REFL) TY II-C-R DOLLARS and CENTS	EA	1,365.000	208
	662	2064		WK ZN PAV MRK REMOV (W) 4" (BRK) DOLLARS and CENTS	LF	32,381.000	209
	662	2065		WK ZN PAV MRK REMOV (W) 4" (DOT) DOLLARS and CENTS	LF	137.000	210
	662	2066		WK ZN PAV MRK REMOV (W) 4" (LNDP) DOLLARS and CENTS	LF	621.000	211
	662	2067		WK ZN PAV MRK REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	158,971.000	212
	662	2075		WK ZN PAV MRK REMOV (W) 8" (SLD) DOLLARS and CENTS	LF	18,712.000	213
	662	2077		WK ZN PAV MRK REMOV (W) 12" (SLD) DOLLARS and CENTS	LF	471.000	214
	662	2079		WK ZN PAV MRK REMOV (W) 24" (SLD) DOLLARS and CENTS	LF	828.000	215

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	2084		WK ZN PAV MRK REMOV (W) (ARROW) DOLLARS and CENTS	EA	6.000	216
	662	2093		WK ZN PAV MRK REMOV (W) (UTURN ARROW) DOLLARS and CENTS	EA	2.000	217
	662	2094		WK ZN PAV MRK REMOV (W) (WORD) DOLLARS and CENTS	EA	6.000	218
	662	2096		WK ZN PAV MRK REMOV (W) 36" (YLD TRI) DOLLARS and CENTS	EA	8.000	219
	662	2099		WK ZN PAV MRK REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	178,887.000	220
	666	2002		REFL PAV MRK TY I (W) 4" (BRK)(090MIL) DOLLARS and CENTS	LF	14,460.000	221
	666	2005		REFL PAV MRK TY I (W) 4" (DOT)(090MIL) DOLLARS and CENTS	LF	485.000	222
	666	2011		REFL PAV MRK TY I (W) 4" (SLD)(090MIL) DOLLARS and CENTS	LF	70,314.000	223
	666	2029		REFL PAV MRK TY I (W) 8" (DOT)(090MIL) DOLLARS and CENTS	LF	199.000	224
	666	2035		REFL PAV MRK TY I (W) 8" (SLD)(090MIL) DOLLARS and CENTS	LF	16,491.000	225

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	2041		REFL PAV MRK TY I (W) 12"(SLD)(090MIL) DOLLARS and CENTS	LF	3,812.000	226
	666	2104		REFL PAV MRK TY I (Y) 4" (BRK)(090MIL) DOLLARS and CENTS	LF	100.000	227
	666	2110		REFL PAV MRK TY I (Y) 4" (SLD)(090MIL) DOLLARS and CENTS	LF	68,113.000	228
	666	2189		PAVEMENT SEALER 4" DOLLARS and CENTS	LF	164,852.000	229
	666	2191		PAVEMENT SEALER 8" DOLLARS and CENTS	LF	16,690.000	230
	666	2193		PAVEMENT SEALER 12" DOLLARS and CENTS	LF	5,289.000	231
	666	2195		PAVEMENT SEALER 24" DOLLARS and CENTS	LF	786.000	232
	666	2246		REF PAV MRK TY I (BLACK)4"(BRK)(090MIL) DOLLARS and CENTS	LF	11,360.000	233
	666	2379		REFL PAV MRK TY I (W)12"(DOT)(90 MIL) DOLLARS and CENTS	LF	426.000	234
	668	2105		PREFAB PAV MRK TY C (W) (24") (SLD) DOLLARS and CENTS	LF	646.000	235
	668	2106		PREFAB PAV MRK TY C (W) (ARROW) DOLLARS and CENTS	EA	39.000	236

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	668	2107		PREFAB PAV MRK TY C (W) (DBL ARROW) DOLLARS and CENTS	EA	4.000	237
	668	2112		PREFAB PAV MRK TY C (W) (RR XING) DOLLARS and CENTS	EA	4.000	238
	668	2116		PREFAB PAV MRK TY C (W) (WORD) DOLLARS and CENTS	EA	28.000	239
	668	2118		PREFAB PAV MRK TY C (W) (36")(YLD TRI) DOLLARS and CENTS	EA	27.000	240
	668	2128		PREFAB PAV MRK TY C (Y) (24") (SLD) DOLLARS and CENTS	LF	140.000	241
	672	2010	034	REFL PAV MRKR TY I-A DOLLARS and CENTS	EA	143.000	242
	672	2012	034	REFL PAV MRKR TY I-C DOLLARS and CENTS	EA	121.000	243
	672	2014	034	REFL PAV MRKR TY I-R DOLLARS and CENTS	EA	98.000	244
	672	2015	034	REFL PAV MRKR TY II-A-A DOLLARS and CENTS	EA	318.000	245
	672	2017	034	REFL PAV MRKR TY II-C-R DOLLARS and CENTS	EA	1,862.000	246
	677	2001		ELIM EXT PAV MRK & MRKS ( 4") DOLLARS and CENTS	LF	74,967.000	247

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	677	2003		ELIM EXT PAV MRK & MRKS ( 8") DOLLARS and CENTS	LF	2,416.000	248
	677	2005		ELIM EXT PAV MRK & MRKS (12") DOLLARS and CENTS	LF	723.000	249
	677	2007		ELIM EXT PAV MRK & MRKS (24") DOLLARS and CENTS	LF	1,217.000	250
	678	2001		PAV SURF PREP FOR MRK ( 4") DOLLARS and CENTS	LF	164,852.000	251
	678	2003		PAV SURF PREP FOR MRK ( 8") DOLLARS and CENTS	LF	16,740.000	252
	678	2004		PAV SURF PREP FOR MRK (12") DOLLARS and CENTS	LF	5,006.000	253
	678	2006		PAV SURF PREP FOR MRK (24") DOLLARS and CENTS	LF	786.000	254
	680	2002		INSTALL HWY TRF SIG (ISOLATED) DOLLARS and CENTS	EA	1.000	255
	682	2001	003	BACK PLATE (12 IN) (3 SEC) DOLLARS and CENTS	EA	15.000	256
	682	2022	003	VEH SIG SEC (12 IN) LED (GRN ARW) DOLLARS and CENTS	EA	3.000	257
	682	2023	003	VEH SIG SEC (12 IN) LED (GRN) DOLLARS and CENTS	EA	12.000	258

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	682	2024	003	VEH SIG SEC (12 IN) LED (YEL ARW) DOLLARS and CENTS	EA	2.000	259
	682	2025	003	VEH SIG SEC (12 IN) LED (YEL) DOLLARS and CENTS	EA	13.000	260
	682	2026	003	VEH SIG SEC (12 IN) LED (RED ARW) DOLLARS and CENTS	EA	2.000	261
	682	2027	003	VEH SIG SEC (12 IN) LED (RED) DOLLARS and CENTS	EA	13.000	262
	682	2066	003	PED SIG SEC (12 IN) LED (COUNTDOWN) DOLLARS and CENTS	EA	12.000	263
	684	2009		TRF SIG CBL (TY A) (12 AWG) ( 4 CONDR) DOLLARS and CENTS	LF	4,920.000	264
	684	2010		TRF SIG CBL (TY A) (12 AWG) ( 5 CONDR) DOLLARS and CENTS	LF	3,845.000	265
	686	2053		INS TRF SIG PL AM(S) 1 ARM (50') LUM DOLLARS and CENTS	EA	2.000	266
	686	2185		INS TRF SIG PL AM(S) 2 ARM (50-36') LUM DOLLARS and CENTS	EA	1.000	267
	686	2189		INS TRF SIG PL AM(S) 2 ARM (50-40') LUM DOLLARS and CENTS	EA	1.000	268
	687	2001	004	PED POLE ASSEMBLY DOLLARS and CENTS	EA	4.000	269

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	740	2005	001	ANTI-GRAFFITI COATING (PERMANENT) DOLLARS and CENTS	SF	119,737.000	270
	1122	2002	001	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	1,126.000	271
	1122	2009	001	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	1,126.000	272
	1122	2037	001	TEMPORARY SEDIMENT CONTROL FENCE INSTLL DOLLARS and CENTS	LF	19,147.000	273
	1122	2049	001	BIOGRD EROSN CONT LOGS (18" DIA)INSTALL DOLLARS and CENTS	LF	4,882.000	274
	1122	2056	001	BIODEGRADBLE EROSION CONTROL LOGS REMOV DOLLARS and CENTS	LF	4,882.000	275
	1122	2057	001	TEMPORARY SEDIMENT CONTROL FENCE REMOVE DOLLARS and CENTS	LF	19,147.000	276
	3199	2001		FAST TRK CONC (CNT RNF HY STL)(12 IN) DOLLARS and CENTS	SY	2,538.000	277
	3268	2008		D-GR HMA TY-B PG64-22 DOLLARS and CENTS	TON	59,301.000	278

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	3268	2026		D-GR HMA TY-C SAC-A PG70-22 DOLLARS and CENTS	TON	14,944.000	279
	4116	2001	001	SOIL NAIL ANCHORS DOLLARS and CENTS	LF	40,990.000	280
	4562	2002		PRE-CAST TRENCH DRAIN(WITHOUT CON PVMT) DOLLARS and CENTS	LF	1,127.000	281
	5165	2001		GEOGRID REINFORCE EMBANKMENTS (TY A) DOLLARS and CENTS	SY	13,153.000	282
	5367	2010		REMOVE CABLE BARRIER TERMINAL SEC- TION DOLLARS and CENTS	EA	6.000	283
	5367	2011		REMOVE CABLE BARRIER DOLLARS and CENTS	LF	12,370.000	284
	6007	2001		REMOVING TRAFFIC SIGNALS DOLLARS and CENTS	EA	1.000	285
	6266	2001	017	VIVDS PROCESSOR SYSTEM DOLLARS and CENTS	EA	1.000	286
	6266	2002	017	VIVDS CAMERA ASSEMBLY DOLLARS and CENTS	EA	6.000	287
	6266	2003	017	VIVDS SET-UP SYSTEM DOLLARS and CENTS	EA	1.000	288



ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	6266	2005	017	VIVDS COMMUNICATION CABLE (COAXIAL) DOLLARS and CENTS	LF	2,035.000	289
	6834	2002	002	PORTABLE CHANGEABLE MESSAGE SIGN DOLLARS and CENTS	EA	4.000	290
	7642	2001		SLIP LINING BOX CULVERT DOLLARS and CENTS	LF	318.000	291
	8736	2001		REMOVE AND RELOCATE DYNAMIC MES- SAGE SGN DOLLARS and CENTS	EA	1.000	292
	8835	2001		ACCESSIBLE PEDESTRIAN SIGNAL UNITS DOLLARS and CENTS	EA	12.000	293

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**General Notes:**

**Protection of Fiber-Optic Cable Systems:**

Fiber-optic cable systems may be buried on the Railroad's property. Protection of the fiber-optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. The State and/or its Contractor shall telephone the Railroad during normal business hours (7:00 a.m. to 9:00 p.m., Central Standard Time, Monday through Friday, except holidays) at (800) 336-9193 (also a 24-hour, seven-day number for emergency calls) to determine if fiber-optic cable is buried anywhere on the Railroad's premises to be used by the State. If it is, the State and/or its Contractor will telephone the telecommunications company(ies) involved, arrange for a cable locator, and make arrangements for relocation or other protection of the fiber-optic cable prior to beginning any work on the Railroad's premises.

Maintain the existing and proposed sections of highway and its appurtenances which are to be constructed, reconstructed or modified in this project. Repair those sections damaged by the contractor's forces at Contractor's expense. Repair the portions of roadway damaged by others by force account.

Assume full responsibility for the preservation of all sod, shrubbery, and trees at the site during construction. Carefully preserve and replace, in their original position, all sod and shrubbery removed. Replace all contractor damaged sod or shrubbery at the contractor's own expense.

Assume ownership for all designated waste material and dispose of it at a place off of the right of way, as approved by the engineer. Allow state forces to enter this project to accomplish such work as shown in the plans (by others) and as may be deemed necessary by the Engineer.

State and city forces will maintain the existing sections of highway and its appurtenances that are not a part of this project. Repair those sections damaged by the Contractor's forces at the Contractor's expense.

Move existing signs, mailboxes, delineators and any other similar obstructions that interfere with construction to temporary locations approved by the engineer. This temporary location work shall be subsidiary to the various bid items. Move them back to their permanent positions when the work progresses to the point where this is possible. Place the sign post back in accordance with the applicable standard sheets. TxDOT may decide to replace these existing signs, mailboxes, delineators and other similar obstructions and they will be a pay item.

Consider the locations of underground utilities depicted in the plans as approximate and employ responsible care to avoid damaging utility facilities. Depending upon scope and magnitude of planned construction activities, advanced field confirmation by the utility owner or operator may be prudent. Where possible, protect and preserve permanent signs, markers, and designations of underground facilities.

If the Contractor damages or cause damage (breaks, leaks, nicks, dents, gouges, etc.) to the utility, contact the utility facility owner or operator immediately.

Remove and dispose of abandoned lines encountered that interfere with the construction of this project. Consider this work to be subsidiary to the various bid items of the contract.

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**Control:** 0028-14-109, etc

Direct attention to ordinances and regulations of local municipal and county governments and the TCEQ (Texas Commission on Environmental Quality), which may be applicable on this project.

Take reasonable measures to avoid the death of any migratory birds, their young or their eggs.

Procure all the necessary city and/or county permits and licenses.

Overlay across the ends of any curb ramps must not create a barrier to their use. Changes in level up to ¼" may be vertical; between ¼" and ½" must be beveled with a slope no greater than 1:2; greater than ½" shall require a "ramp".

Place no construction signs in conflict with existing signs. If placement of construction signs for contract blocks existing signs, make adjustments with confirmation from the Engineer.

In addition to providing a Contractor's Responsible Person and a phone number for emergency contact, have an employee available to respond on the project for emergencies and for taking corrective measures within 30 minutes.

The Contractor shall designate a clean-out area for concrete trucks. No other area will be allowed without approval of the Engineer.

The following standard detail sheets have been modified:

No standard detail sheets have been modified for this project

### **Item 5 Control of the Work**

Any earthwork cross-sections, computer printouts, data files and any other information provided is for non-construction purposes only and it is the responsibility of the prospective bidder to validate the data with the appropriate plans, specifications and estimates for the projects. Contact the Area Office for information on availability.

The responsibility for the construction surveying on this contract will be in accordance with Article 5.6.A, "Method A".

Station the project prior to commencing work. Mark the stations every 100 feet. Maintain stationing throughout the duration of the project. Remove station markings at the completion of the project. Consider this work to be subsidiary to the various bid items of the contract.

Verify all horizontal and vertical control prior to beginning work.

### **Item 6 Control of Materials**

Lead based paint has been identified on the BU 90-Y (Simmons Dr.) bridge beams. Removal and abatement has been accomplished at locations that should allow for the beams to be cut and removed. Should it be determined that additional locations will need to be cleaned for removal and demolition purposes, contact the Engineer as soon as such a determination is made and coordinate with the State to minimize disruption to the project construction schedule.

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**Control:** 0028-14-109, etc

### **Item 7 Legal Relations and Responsibilities**

Furnish all materials, labor and incidentals required to provide for traffic across the highway and for temporary ingress and egress to private property in accordance with article 7.7 of the standard specifications at no additional cost to the state. Consider this work to be subsidiary to the various bid items of the contract.

Maintain the roadway slope stability. Temporary retaining structures or shoring may be required. Before installing any proposed temporary retaining structures or shoring, secure written approval. Submit design calculations, working drawings and a plan of operations including sequencing. Maintaining slope stability is subsidiary to the various bid items.

This contract requires work performed on railroad property. Cooperate with the railroads and comply with all of their requirements including obtaining any training they require before performing work on railroad property.

The UP Railroad right of way is located within this project. Take necessary precautions to insure that no debris or material is dropped on the railroad's tracks.

Execute the Contractor's Right of Entry Agreement with the railroad before commencing any work on the railroad's property.

#### **Protection of Fiber Optic Cable Systems:**

Fiber optic cable systems may be buried on the railroad's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. The State and/or its Contractor shall (five working days before any work is performed) telephone the railroad during normal business hours (7:00 A.M. to 9:00 P.M., Central time, Monday through Friday, except holidays) at 1-800-336-9193 (also a 24-hour, seven-day number for emergency calls) to determine if fiber optic cable or other type of cable is buried in the general location where the work is to be performed. If it is, the State and/or its Contractor will telephone the telecommunications company(ies) involved, arrange for a cable locator and make arrangements for relocation or other protection of the fiber optic cable prior to beginning any work on the railroad's premises.

There shall be no crossing of the railroad's tracks except at existing, open, and public crossings, or at locations mutually agreed upon by the railroad(s) representative.

Provide two SW3P Notification Boards for this project. Each board will include a laminated copy of the field office location, construction site notice, notice of intent, and any permit certificate issued for the project. Notification Boards are to be placed at locations within the right-of-way but outside the clear zone as directed by the Engineer. Consider this work to be subsidiary to the various bid items of the contract.

The U.S. Corps of Engineers nationwide permit # 3a covers this project. Maintain a neat and clean worksite next to the water and do not allow any debris to fall into the water.

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**Control:** 0028-14-109, etc

### **Item 8 Prosecution and Progress**

Compute and charge working days in accordance with Article 8.3.A.1 Five-Day Workweek.

Notify the Engineer 5 business days in advance of any temporary or permanent lane, ramp or connector affected by closures, detours, or restrictions to lane widths, alterations to vertical clearances or modifications to alignment/radii. Any other modification to the roadway that may adversely affect the mobility of oversized/overweight trucks also requires 5 business day advance notice to the Engineer.

Road closures which are part of the TCP cannot take place between 7 am and 8 pm. One lane in each direction of each travel way is to remain open at all times. For all lane closures, provide written closure notice to the Engineer by 1 pm on the business day prior to the closure. For closures on Monday or following a Holiday, furnish the notice to the Engineer the workday prior to the lane closure. Lane closures will not be allowed if this reporting requirement is not met. Any variations from this will require written approval of the Engineer.

Regardless of the closure hours, no lane, ramp or connector closures are allowed during special events without written approval of the Engineer.

Work requiring traffic to be reduced to one lane will be allowed only at night or during weekends, and only with written approval of the Engineer. Give notice to the Beaumont Area Office a minimum of 72 hours in advance for this approval. Unless otherwise approved by the Engineer, nighttime hours will be defined as 9:00 pm until 5:00 am, Sunday night thru Thursday night. Weekend hours will be defined as 9:00 pm on Friday night until 5:00 am on Monday morning.

Adjoining projects may be in progress during the construction of a portion of this project. Plan and prosecute the sequence of construction and the traffic control plan with adjacent construction projects, if applicable. Manage construction of all phases to minimize disruption to traffic.

### **Item 100 Preparing Right of Way**

Keep roadway ditches and drainage structures clean and free of debris while Preparing Right of Way.

Heavy equipment rutting shall be graded to the existing terrain profile. Consider this work to be subsidiary to the various bid items of the contract.

Have on hand sufficient manpower, equipment, and traffic control to safely stop traffic and clear the roadway of debris during tree felling operations. When warranted or directed, stop traffic on the adjacent roadway prior to felling each tree. Release traffic again after the felled tree is safely on the ground. Every effort should be made to avoid felling trees onto the roadway. Remove any tree so felled within 5 minutes. Consider this work to be subsidiary to the various bid items of the contract.

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**Control:** 0028-14-109, etc

#### **Item 104 Removing Concrete**

Removal and disposal of existing "Terminal Anchor Lugs" and "Sleeper Slabs" will be subsidiary to the various bid items.

Saw the longitudinal break-back line when removing the existing concrete pavement for stage construction. Saw depth to be approximately two (2) inches. The saw depth is to increase, if the edge of the existing concrete pavement to remain in place is not reasonably straight or as directed by the engineer. Consider Saw cuts, as shown on the plans, subsidiary to this Item, "Removing Concrete".

Replace that portion of the pavement removed where the storm sewer crosses the existing concrete pavement and replace it with approximately ten (10) inches of flexible base and one (1) inch of asphaltic concrete pavement. Consider this work to be subsidiary to the various bid items of the contract.

#### **Item 105 Removing Stabilized Base and Asphalt Pavement**

Assume ownership of material not deemed salvageable and dispose of in accordance with applicable regulation. Haul and stockpile the unused material as directed by the Engineer. Store the treated material salvaged from this project at the location near the intersection of SH 62 and FM 1078. Contact Mark Cox at 409-883-3476 or Karl Hunter at 409-924-6526 a minimum of 48 hours ahead of time. Consider this work subsidiary to Item 105.

#### **Item 110 Excavation**

Transition the ditch grades and channel bottom widths at structure locations. Use only approved channel excavation in the embankment.

The total excavation quantity shown on the plans includes the quantity for excavating to 2 ft. behind the back of the proposed curb.

Do not windrow or stockpile material next to or along the roadway. Move excess material from project site daily.

Material excavated may be used as embankment if it passes the Item 132 test requirements.

The total excavation quantity shown on the plans includes the quantity for excavating to 2 ft. behind the back of the proposed curb.

#### **Item 132 Embankment**

Compaction method specified as density control compaction.

Test embankment material used on the project which has a Liquid Limit exceeding 45 for Liquid Limits at the rate of one test per 20,000 cubic yards or per total quantity less than 20,000 cubic yards, unless otherwise directed. Only use material that passes the above tests.

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Type A embankment is required for the top 3 feet below pavement structure. Type B embankment will be allowed at all other locations.

**Item 164 Seeding for Erosion Control**

Eliminate seeding in areas of natural growth deemed by the engineer to have sufficient cover.

**Item 166 Fertilizer**

Fertilize all the seeded areas of project.

**Item 168 Vegetative Watering**

Water all the seeded or sodded areas of project. Mechanical watering may not be required during periods of adequate moisture as determined by the Engineer.

Furnish and apply water at a rate of 6788 gallons per acre.

Comply with stabilization requirements for 70% grass coverage; uniform vegetative coverage is required. During this period, meter and operate water equipment under pumping pressure capable of delivering the required quantities of water necessary. Each cycle shall be executed every two (2) days, or as directed by the engineer.

Upon request of the engineer, provide a log book showing daily water usage and receipts of water applied, in addition to metering the water equipment.

**Item 247 Flexible Base**

Allow base time to cure; do not place prime coat until the moisture content of the base is at least 2% less than optimum.

Construct flexible base at a maximum of 4" lifts.

**Item 260 Lime Treatment (Road-Mixed)**

Dry placement of lime will not be permissible.

The Contractor may construct the lime subgrade under a sequence of work in which the application, mixing, and compaction are completed in the same working day.

If using Type A aggregate, in accordance with Item 247, use only Grade 1.

With written approval, eliminate the lime stabilized subgrade at intersections and driveways leaveouts.

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**Item 276 Cement Treatment (Plant Mixed)**

Use Class L, TY A, Grade 1 material

**Item 292 Asphalt Treatment (Plant-Mixed)**

The one inch bond breaker under this item (Item 292.2017 ASPH STAB BASE (GR 4)(PG 64)) gradation shall meet the requirements of Table 4 under special specification 3267 for Type D.

Provide mix designs to the Engineer.

Mix design must be verified and approved by the Engineer.

Maximum depth for any one lift is six (6) inches after compaction.

Use of RAP will be allowed as approved by the Engineer.

Compaction method is specified as density control unless otherwise approved by the Engineer.

**Item 305 Salvaging, Hauling, and Stockpiling Reclaimable Asphalt Concrete**

Stockpile 5,000 CY of RAP generated under this item at the designated location near SH 62 and FM 1078. Stockpile approximately 4,000 CY of RAP generated under this item at the designated location near SH 87 and SH 12. Assume ownership of any remaining RAP generated and dispose of according to all applicable laws and regulations.

Ensure that all RAP stockpiled for State use meets the requirement of the Standard Specification for this item that 95% passes a 2-in. sieve.

**Item 310 Prime Coat**

Use bituminous material of the type AE-P. Distribute the bituminous material smoothly and evenly at the rate of 0.15 gallons per square yard.

There will be no blotting material required.

**Item 361 – Full Depth Repair of Concrete Pavement**

Schedule work so that concrete placement follows full-depth saw cutting by no more than 2 days.

**Item 403 Temporary Special Shoring**

Submit design calculations and detail sheets bearing the seal of a licensed professional Engineer for all temporary shoring. Do not begin work until the design calculations and detail sheets have been approved. The contractor will be responsible for the complete design, fabrication and removal of the temporary shoring.



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**Item 416: Drilled Shaft Foundations**

Leave minimum of one full diameter thread exposed on each anchor bolt securing a signal.

Set signal pole foundations so that two anchor bolts are in compression and two anchor bolts are in tension.

Use Class C concrete.

Place all Concrete for each signal pole foundation in one pour. Grout and rub any exposed signal pole foundation concrete.

Tack weld foundation spiral wire to the reinforced steel bars at all points.

Complete each foundation installation, started that day, by the end of that day's work. Ensure there will be no open foundation shafts (holes) at the end of each day.

Provide ground rods a minimum of 10 feet in length.

**Item 420 Concrete Structures**

Do not use membrane curing for structural elements.

Provide an ordinary surface finish as shown under Specification Item 420.4.M, except for locations as otherwise indicated under Item 427.

**Item 421 – Hydraulic Cement Concrete**

Entrained air is required for Class P or in any slip formed concrete (bridge rail, concrete traffic barrier, pavement, etc.) only. If the Contractor elects to include entrained air in structural concrete, only the maximum air content will be tested for acceptance.

**Item 423 – Retaining Wall**

Provide Ashlar Rock surface finish for walls.

Use Type A backfill for permanent MSE walls.

For MSE walls, provide a system from one of the approved suppliers as listed on the following website:

<http://www.txdot.gov/business/resources/approved-systems/mse-wall.html>

**Item 427 Surface Finishes for Concrete**

Provide the following surface finish for the listed elements:

Bridge rail to be finished is Surface Area IV.

Retaining Wall to be finished is Surface Area I.

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### **Item 430 – Extending Concrete Structures**

Choose any of the following methods for tying the proposed culvert extensions to the existing structure ends:

- (1) Break back end of existing structure to back of headwall and weld new reinforcing steel to exposed reinforcing steel in accordance with provisions of Item 448, “Structural Field Welding”.
- (2) Break back end of existing structure to leave at least 18” of reinforcing steel exposed and lap and tie new steel to old steel.
- (3) Break back end of existing structure to back of headwall and dowel into end of existing structure with No. 6 x 2’ dowels on 12” centers. Anchor dowel 12” into the existing structure using an approved epoxy.
- (4) Break back end of existing structure to back of headwall and dowel into end of existing structure with No. 6 x 2’ dowels and cinch anchors on 12” centers. Thread one end of dowels as necessary to fit anchors or studs.

Regardless of the method used, the length of the proposed extension will be measured from the back of the existing headwall.

### **Item 502 Barricades, Signs, and Traffic Handling**

The Contractor Force Account “Safety Contingency” that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor’s Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Follow the phasing sequence provided unless otherwise agreed upon by the Area Engineer and the Project Manager. All changes to the phasing sequence will be submitted to the Area Engineer for consideration and approval at least 72 hours prior to any changes being made. Changes to the original sequence will contain a layout showing construction phasing, all signs, and striping. The proposed sequence of work shall minimize the inconvenience to the traveling public. Supporting documentation will be made available to the Engineer upon request.

Attention is directed to the requirements of Item 7, “Leal Relations and Responsibilities” of the standard specifications. All construction shall be performed so as to ensure the safety of the traveling public.

Install adequate signs and barricades, as approved by the Engineer, prior to opening any roadway section to traffic. The Engineer may direct the contractor to adjust or furnish additional signs, barricades, and channelizing devices as required to maintain traffic and motorist safety during construction. Any such traffic control devices shall be considered subsidiary to item 502.

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**Control:** 0028-14-109, etc

Signs shown to be placed in the Traffic Control Plan sheets are to remain in place and maintained for as long as the relevant condition exists in subsequent phases.

Carefully monitor the work site to ensure that all delineation devices, signs, and pavement markings are clean, upright, in good repair, properly located, operating effectively, and in an overall highly visible condition. Problems brought to the contractor's attention shall be corrected as soon as possible and by no later than the next day. This shall include corrections necessary due to acts of vandalism or accidents.

Remove all traffic control devices from the roadway, off of the right of way, when they are not in use. Devices scheduled to be used within 3 days may be placed along the shoulder of the roadway or right of way when not in use, or stored in other approved areas on the project. Cover any construction signs that are not in effect and are installed in a fashion that will not allow them to be removed from the right of way easily.

Use drums only instead of vertical panels or cones as traffic control devices for night-time work.

Spacing for drums as shown on all TCP phase plan sheets shall be as shown on the TCP standards for the relevant speed.

All portable concrete barriers should be placed in a manner that exposed ends are not facing traffic. In situations where this is not possible, the adjacent lane is to be closed and a truck mounted attenuator will be used to protect the exposed end.

Arrange asphalt laydown schedule to meet plan striping requirements.

Construct all work zone signs, sign supports, and barricades from material other than wood unless approved by the Engineer. Galvanize steel supports if used. Aluminum posts, if used, shall meet the following minimum thickness requirements:

<u>Square Feet</u>	<u>Minimum Thickness</u>
Less than 7.5	0.080 inches
7.5 to 15	0.100 inches
Greater than 15	0.125 inches

Work requiring traffic to be reduced to one lane on IH 10 will only be allowed at non-peak hours, and only with written approval of the Engineer. A request for reducing traffic to one lane must be made 72 hours in advance. Unless otherwise approved by the Engineer, non-peak hours are defined as 9:00 PM until 5:00 AM, Sunday night through Thursday night, or 9:00 PM on Friday night through 5:00 AM on Monday morning.

Unless otherwise noted in the plans or directed by the engineer, all CSB used for TCP shall have drainage slots.

All attenuators should be clear of the travel lanes by a minimum of two (2) feet in every phase. Where the concrete traffic barrier is two (2) feet or less from the travel lane, the end of the concrete barrier should be gradually skewed (no greater than 25:1 skew relative to traffic) until two (2) feet or greater clear offset is achieved.

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Pavement drop-offs greater than two (2) inches must be sloped back to a minimum of 3: slopes at the end of each day's operations. See "Treatment for Various Edge Conditions" sheet for additional edge drop-off requirements.

Seven days advance notice will be required for all road and side street closures. Special times and procedures will also be required subject to the Engineer's direction.

Provide a pilot car where two-way traffic is restricted to one lane during work hours when direct line of sight is impaired from one end of the work zone to the other or when required by the engineer. Equip pilot car with a portable mounted sign type G20-4 with two revolving or blinking type lights. Consider this work subsidiary to the various bid items.

Law enforcement assistance will be required for this project and is expected to be required for major traffic control changes and lane closures. Full-time, off-duty uniformed officer(s), with transportation jurisdiction and full police powers in the county or city in which the project is located, shall be provided by the Contractor during construction as directed by the Engineer. The officer(s) must be able to show proof of certification by the Texas Commission on Law Enforcement Officers Standards. The cost of providing the officer(s) shall be paid for on a force account basis as per Item 9.5 Force Account of the 2004 Texas Standard Specifications. The costs for coordinating scheduling of the off-duty uniformed officer(s) will not be paid for directly but shall be considered subsidiary to the various bid items of the contract. Coordinate with local law enforcement and arrange for law enforcement as directed or agreed by the Engineer. Complete the daily tracking form provided by the Department and submit invoices that agree with the tracking form for payment at the end of each month approved services were provided.

Law enforcement will be considered for this contract under the following conditions unless otherwise directed by the Engineer:

- Work involving controlled access facilities,
- Night work operations that create substantial traffic safety risks for workers and/or road users,
- Major traffic shifts involving high speed (greater than 55 MPH) and/or high volume roadways (ADT exceeds 10,000),
- Traffic shifts at intersections where unexpected or sudden queuing is anticipated,
- Complex intersections where flaggers may not be able to maintain adequate traffic control.

CW21-4 ("TRUCKS ENTERING HIGHWAY") signs shall be placed 300' to 500' prior to all locations where construction vehicles are accessing IH 10 from the construction work zones.

#### **Item 504 Field Office and Laboratory**

Provide a high speed internet connection in the hot mix laboratory at the plant that produces their mix for use by the State.

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**Item 512 Portable Concrete Traffic Barrier**

Barrier from existing stockpiles that substantially meet the requirements of standards sheets PCTB(1)-04, PCTB(2)-04, and PCTB(3)-04 may be used on this project. New barrier of this type shall not be cast for this project.

Portable Concrete Traffic Barrier is to be pinned at the locations specified in the Summary Sheets – Work Zone Traffic Control Items, Sheet 2 of 2.

**Item 514 Permanent Concrete Traffic Barrier**

Permanent Concrete Traffic Barrier will be cast in place unless otherwise directed.

**Item 540 Metal Beam Guard Fence**

Galvanize the rail elements supplied for this project by using a Type II Zinc Coating.

**Item 542 Removing Metal Beam Guard Fence**

Accept ownership and properly dispose of metal beam guard fence and terminal anchors in accordance with federal, state and local regulations.

**Item 544 Guardrail End Treatments**

Mark Guardrail End Treatments with object markers according to the standard D&OM(VIA)-04. Payment for all required object markers and barrier reflectors on the end treatment are subsidiary to this item.

**Item 545 Crash Cushion Attenuators**

Provide one of the following types of attenuators for temporary installations:

TAU-II-R	REACT
TAU-II	SMTC
ABSORB	ACZ(350)

See standards in the plan set for information describing the attenuator's details: direction of traffic, design speed, foundation, backup support, backup width, and/or transition options.

Provide and install appropriate type of transition for each version of attenuator used as specified by manufacturer. Consider this work to be subsidiary to this item.

All attenuators used during construction shall be designed for the maximum possible posted speed. For example, if the 65 mph reduced speed zone is being used, but there is a chance that it may be covered up for any period during the phase, the normal posted speed will be used for determining the length of the attenuators.

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Mark attenuators with object markers according to the standard D&OM(VIA)-04. Payment for all required object markers and barrier reflectors on the attenuators will be considered subsidiary to this item.

### **Item 585 Ride Quality for Pavement Surfaces**

Use Surface Test Type B pay adjustment schedule 2 to evaluate ride quality of the travel lanes and shoulders in accordance with Item 585, "Ride Quality for Pavement Surfaces."

### **Item 610 Roadway Illumination Assemblies**

Fabricate steel roadway illumination poles in accordance with TxDOT standards RIP-2011 (Roadway Illumination Poles -2011). Poles fabricated according to RIP-2011 require no shop drawings.

Alternate designs to RIP 2011 or the use of aluminum to fabricate poles will require the submission of shop drawings electronically.

For instructions on submitting shop drawings electronically go to TxDOT home page, Business, Resources, Bridge Specifications, Shop drawings. File is titled: Guide to Electronic Shop Drawing Submittal.

The Roadway Illumination Pole (RIP-11) standard details were developed for installations in locations where the 3-second gust basic maximum wind speed is 110 mph, and where the elevation of the base of the pole is less than (i.e. not more than) 25' above the elevation of surrounding terrain, in accordance with the "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals," 4<sup>th</sup> Edition (2001) (AASHTO Design Specifications). For poles to be installed in regions where the maximum basic wind speed exceeds 110 mph or to be mounted more than 25' above the surrounding terrain, the contractor shall provide poles meeting the following requirements:

- A. **Submittals.** Following the electronic shop drawing submittal process (see [ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e\\_submit\\_guide.pdf](ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e_submit_guide.pdf)), the contractor shall submit to the Engineer, for approval, fabrication drawings and calculations for the poles. The drawings and calculations shall be sealed by a Texas registered or licensed professional engineer (P.E.).
- B. **Luminaire Structural Support Requirements.** Lighting poles, arms, and anchor bolt assemblies shall have a 25 year design life to safely resist dead loads, ice loads and the required basic wind speeds at the location of installation in accordance with the current edition of the AASHTO Design Specifications. For transformer base poles, the fabricator shall include transformer base and connecting hardware in calculations and shop drawing submittals. All transformer bases shall have been structurally tested to resist the theoretical plastic moment capacity of the pole. Certification of the plastic moment load test and FHWA breakaway requirement test of the model of base being furnished shall be submitted with the shop drawings. Shop drawings shall show breakaway base model

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number, and manufacturer's name and logo. Manufacturer's shop drawings shall include the ASTM designations for all materials to be used.

### **Item 618 Conduit**

Do not use cast iron junction boxes in concrete traffic barriers and single slope traffic barriers. Use polymer concrete junction boxes instead of the cast iron junction boxes shown on standard sheets CTBI (3), CTBI (4), AND SSCB (4). Mount the junction boxes flush (+ 0", - 1/2") with concrete surface of concrete barrier.

Use materials from prequalified material producers list as shown on the Texas Department of Transportation (TxDOT) materials producers list. Category is "Roadway Illumination and Electrical Supplies."

The polymer concrete barrier box will not be paid for separately, but will be considered subsidiary to ITEM 618, "CONDUIT".

Where PVC, duct cable, and HDPE conduit 1" and larger is allowed and installed as per TxDOT standards, provide a PVC elbow in place of the galvanized rigid metal elbow required by the Electrical Detail standards. Ensure the PVC elbow is of the same schedule rating as the conduit to which it is connected. Ensure only a flat, high tensile strength polyester fiber pull tape is used for pulling conductors through the PVC conduit system.

PVC Conduit systems that snap or lock together without glue and that are UL listed to be used for bored PVC electrical applications, will be allowed for PVC Schedule 40 and PVC schedule 80 upon approval.

Place conduit under existing roadways and/or driveways as directed by the Engineer and in accordance with Item 476.

Cap, not glue, open ends of conduit.

Ensure open trenches and excavations are filled at the end of each work day.

Leave a minimum length of 2 feet for each conductor cable in each ground box and in each pole.

### **Item 620 Electrical Conductors**

For both transformer and shoe-base type illumination poles, provide double-pole breakaway fuse holder as shown on the Texas Department of Transportation (TxDOT) materials producers list. Category is "Roadway Illumination and Electrical Supplies". Fuse holder is shown on list under Items 610 & 620.

Provide 10 amp time delay fuses.

For flashing beacons (Item 685) and ped poles (Item 687) within the project, provide single pole non-fused watertight breakaway electrical connectors. Provide Bussman HEBW, Littelfuse LEB, Mersen/Ferraz-Shawmut FEB, or equal on ungrounded (hot) conductors. Install dummy fuse (slug) instead of fuse. For all grounded (neutral) conductors provide Bussman HET, Littelfuse LET, Mersen/Ferraz-Shawmut FEBN, or equal. These breakaway connectors have a white colored marking and a permanently installed dummy fuse (slug).

**County:** Orange

**Highway:** IH 10

**Control:** 0028-14-109, etc

**Item 624: Ground Boxes**

Place ground boxes 5 feet from the edge of shoulder or curb or as otherwise directed.

Class A concrete will be considered miscellaneous.

**Item 628: Electrical Services**

Construct electrical services as shown on the ED sheets. Make all arrangements for electrical services and comply with local standards for proper installation.

Ensure the service closure is assembled by a Company shown on the prequalified Material Producers List for "Roadway Illumination and Electrical Supplies" located on the following web site:

<http://www.txdot.gov/business/resources/producer-list.html>

Before any UL listed electrical service assembly can be purchased or installed an electrical service data chart will have to be furnished with accurate information for that electrical services specific location. This chart is to go to the UL 508A Listed Industrial Control Panel Shop building the service enclosure. The information to be shown on the chart will be as follows: electrical service description as per bid code, service number, service riser conduit size, service conductors number and size, main circuit breaker size, two-pole contactor size when required, panel board ampere rating (which will be a minimum of 100 amps), and branch circuit breakers identified and number of poles and size of branch circuit breakers provided.

**Item 634 Plywood Signs and/or Item 636 Aluminum Signs and/or Item 644 Small Roadside Sign Supports and Assemblies and/or Item 647 Large Roadside Sign Supports and Assemblies**

Remove and stockpile all existing signs and sign posts within the project that are not to remain, at a stockpile location designated by the engineer. Remove the signs from the posts. Replace any signs or post damaged by the contractor at his/her entire expense. Consider this work to be subsidiary to the various bid items of the contract.

**Item 636 Aluminum Signs**

This pay item will be used to pay for large street name signs mounted on the traffic signal span wires or on mast arms.

Small signs for signal operation will be paid for as subsidiary to Item 680.

Provide approved sign mounting hardware for all signs mounted on span wire or mast arms.

Hardware is subsidiary to this item.



**County:** Orange

**Highway:** IH 10

**Control:** 0028-14-109, etc

**Item 644 Small Roadside Sign Supports and Assemblies**

Erect all signs according to the locations shown on the signing layout sheets. Erect Reference Marker signs at the same station as they were located prior to removal.

**Item 658 Delineator and Object Marker Assemblies**

Use Type A reflector unit (sheeting) on delineator assemblies attached to concrete barrier.

Mount reflector at a height of 4.0' to 4.5' from the bottom of the continuous concrete barrier. If this cannot be achieved mount reflector 6" from the top of the barrier to the bottom of the reflector. Bi-directional delineators on center median barrier will be placed on top of the barrier.

Mount reflectors on a steel or concrete bridge rail, where the bridge is greater than 200' in length, at a height of 6" from the top of the rail to the bottom of the reflector.

Use glue-on attachment for delineator assemblies attached to guard fence.

**Item 662 Work Zone Pavement Markings**

Place work zone pavement markings within 7 calendar days after elimination of the existing striping and placement of short term striping. If it is not possible to place the standard pavement markings due to inclement weather, maintain the short-term pavement markings in accordance with Item 662, "Work Zone Pavement Markings" until placement of the standard markings is possible. Maintenance of the short-term pavement markings is subsidiary to this item.

**Item 666 Reflectorized Pavement Markings**

Furnish Type II drop-on glass beads.

Air blowing is subsidiary to this item.

Place pavement markings within 7 calendar days after elimination of the existing striping and placement of short term striping. If it is not possible to place the standard pavement markings due to inclement weather, maintain the short-term pavement markings in accordance with Item 662, "Work Zone Pavement Markings" until placement of the standard markings is possible.

**Item 672 Raised Pavement Markers**

Raised Pavement Markers may not be placed on new surface until it has aged at least 14 days.

**Item 677 Eliminating Existing Pavement Markings and Markers**

Removal of all contaminates and loose material is subsidiary to this item.

**County:** Orange

**Highway:** IH 10

**Control:** 0028-14-109, etc

### **Item 680 Installation of Highway Traffic Signals**

Plans are diagrammatic only and may need to be adjusted by the Engineer to accommodate field conditions.

Provide a continuous bare or green insulated copper wire (equipment ground) throughout the electrical system. Connect equipment ground to all metal conduit, metal signal heads, metal pedestrian push buttons, signal poles, controller housing, service pole ground, ground rods and all other metal enclosures and raceways. Provide the equipment grounding conductors at the same size as the largest current carrying conductor installed in the conduit. In no condition is it to be smaller than #8 AWG as required on ED(2)-03.I.B.15 (head, push button, controllers, etc.) unless otherwise directed.

Cover signal heads with opaque material from the time of installation until the signal is placed in operation.

Wire signal installations to operate in accordance with phase diagrams and to provide signal sequences as shown on the phase sheets in the plans.

Tag each conductor in the controller to clearly indicate its function.

Test and activate detectors before placing controller in operation. Obtain approval before placing a signal on flash.

### **Item 682 Vehicle and Pedestrian Signal Heads**

Provide polycarbonate traffic signal heads.

Provide epoxy connector sealing packages to make connections and/or splices.

Provide continuous conductors without splice from terminal point to terminal point unless otherwise directed. Aluminum conductors may not be used.

The mast arm or signal pole signal head mounting bracket will be the Astro Brac by Pelco Products, Inc. or Equivalent.

### **Item 1122 Temporary Erosion, Sedimentation, and Environmental Controls**

Construct all side slopes on rock filter dams with 6:1 slopes.

**County:** Orange

**Highway:** IH 10

**Control:** 0028-14-109, etc

**Item 3267 Dense-Graded Hot-Mix Asphalt (Small Quantity) &**

**Item 3268 Dense-Graded Hot-Mix Asphalt**

For verification of mix purposes, perform and adhere to the following testing guidelines if using RAP. Additional TEX-242-F (Hamburg Wheel Tests will be subsidiary to the pertinent bid item.

- 1 Required for the JMF (Design Phase)
- 1 Required on the first day of production
- 1 Required for every 10,000 tons thereafter

Hamburg Wheel requirement by Tex-242-F may be waived when approved by the engineer.

Consider all required rolling as subsidiary to this item.

**Item 8736 Remove and Relocate Dynamic Message Sign**

Before pouring drill shaft for relocated DMS, perform a site survey to determine the optimal horizontal and vertical tilt of the DMS. The optimal horizontal and vertical tilt of the DMS is determined by the roadway approach grade and curvature. The horizontal tilt on the sign is achieved by proper anchor bolt orientation, and vertical tilt may be adjusted by Z-brackets located at the rear of the DMS. Contact the DMS manufacturer as needed.

Install a 5/8" diameter x 8' length copper clad steel ground rod as shown on RID(FND)-11, subsidiary to this item.

**Item 8835 Accessible Pedestrian Signal Units**

At intersections where a minimum of 10 ft. spacing between adjacent audible pedestrian signal units is not possible, each audible pedestrian pushbutton must be provided with the following features: A pushbutton locator tone, a tactile arrow, a speech walk message for the walking person indication, and a speech pushbutton information message.

CONTROL : 0028-14-109, ETC  
PROJECT : BR 2013(226), ETC  
HIGHWAY : IH 10  
COUNTY : ORANGE

TEXAS DEPARTMENT OF TRANSPORTATION

**GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS**

ALL SPECIFICATIONS AND SPECIAL PROVISIONS APPLICABLE TO THIS PROJECT  
ARE IDENTIFIED AS FOLLOWS:

STANDARD SPECIFICATIONS: ADOPTED BY THE TEXAS DEPARTMENT OF  
----- TRANSPORTATION JUNE 1, 2004.  
STANDARD SPECIFICATIONS ARE INCORPORATED  
INTO THE CONTRACT BY REFERENCE.

ITEMS 1 TO 9 INCL., GENERAL REQUIREMENTS AND COVENANTS  
ITEM 100 PREPARING RIGHT OF WAY (103)  
ITEM 104 REMOVING CONCRETE  
ITEM 105 REMOVING STABILIZED BASE AND ASPHALT PAVEMENT  
ITEM 110 EXCAVATION (132)  
ITEM 132 EMBANKMENT (100)(204)(210)(216)(400)  
ITEM 160 TOPSOIL  
ITEM 164 SEEDING FOR EROSION CONTROL (162)(166)(168)  
ITEM 168 VEGETATIVE WATERING  
ITEM 216 PROOF ROLLING (210)  
ITEM 247 FLEXIBLE BASE (105)(204)(210)(216)(520)  
ITEM 260 LIME TREATMENT (ROAD-MIXED) (105)(132)(204)(210)(300)  
(310)(520)  
ITEM 276 CEMENT TREATMENT (PLANT-MIXED) (204)(210)(216)(247)(300)  
(310)(520)  
ITEM 292 ASPHALT TREATMENT (PLANT-MIXED) (300)(301)(320)(520)(585)  
(3267)  
ITEM 305 SALVAGING, HAULING, AND STOCKPILING RECLAIMABLE ASPHALT  
PAVEMENT  
ITEM 310 PRIME COAT (300)(316)  
ITEM 360 CONCRETE PAVEMENT (300)(420)(421)(438)(440)(529)(585)  
ITEM 361 FULL-DEPTH REPAIR OF CONCRETE PAVEMENT (300)(340)(360)  
(421)(438)(440)  
ITEM 368 CONCRETE PAVEMENT TERMINALS (247)(260)(276)(292)(300)  
(349)(360)(400)(420)(421)(438)(440)  
ITEM 402 TRENCH EXCAVATION PROTECTION  
ITEM 403 TEMPORARY SPECIAL SHORING (423)  
ITEM 409 PRESTRESSED CONCRETE PILING (404)(420)(421)(424)(425)  
(426)(440)(780)  
ITEM 416 DRILLED SHAFT FOUNDATIONS (420)(421)(440)(448)

ITEM 420 CONCRETE STRUCTURES (400)(404)(421)(426)(427)(438)(440)  
 (441)(448)  
 ITEM 422 REINFORCED CONCRETE SLAB (420)(421)(424)(426)(430)(440)  
 ITEM 423 RETAINING WALLS (110)(132)(400)(420)(421)(424)(440)(445)  
 (458)(556)  
 ITEM 425 PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS (420)  
 (421)(424)(426)(427)(434)(440)(442)  
 ITEM 427 SURFACE FINISHES FOR CONCRETE (420)  
 ITEM 429 CONCRETE STRUCTURE REPAIR (420)(421)(431)(440)  
 ITEM 432 RIPRAP (247)(420)(421)(427)(431)(440)  
 ITEM 442 METAL FOR STRUCTURES (441)(445)(446)(447)(448)(449)  
 ITEM 450 RAILING (420)(421)(424)(440)(441)(442)(445)(446)(448)  
 (540)  
 ITEM 454 BRIDGE EXPANSION JOINTS (429)(442)  
 ITEM 462 CONCRETE BOX CULVERTS AND STORM DRAINS (400)(420)(421)  
 (424)(440)(464)(476)  
 ITEM 464 REINFORCED CONCRETE PIPE (400)(476)  
 ITEM 465 MANHOLES AND INLETS (400)(420)(421)(440)(471)  
 ITEM 466 HEADWALLS AND WINGWALLS (400)(420)(421)(430)(440)(464)  
 ITEM 467 SAFETY END TREATMENT (400)(420)(421)(430)(432)(440)(445)  
 (460)(464)  
 ITEM 474 SLOTTED DRAIN (400)(445)(460)  
 ITEM 476 JACKING, BORING, OR TUNNELING PIPE OR BOX (460)(462)(464)  
 ITEM 481 PVC PIPE FOR DRAINS (400)  
 ITEM 496 REMOVING STRUCTURES (430)  
 ITEM 500 MOBILIZATION  
 ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING  
 ITEM 504 FIELD OFFICE AND LABORATORY  
 ITEM 508 CONSTRUCTING DETOURS (104)(105)(110)(132)(134)(260)(292)  
 (3267)(3269)  
 ITEM 512 PORTABLE CONCRETE TRAFFIC BARRIER (420)(421)(424)(440)  
 (442)  
 ITEM 514 PERMANENT CONCRETE TRAFFIC BARRIER (400)(416)(420)(421)  
 (424)(440)(442)(448)  
 ITEM 529 CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER (360)  
 (420)(421)(440)  
 ITEM 530 INTERSECTIONS, DRIVEWAYS, AND TURNOUTS (247)(260)(263)  
 (275)(276)(292)(316)(330)(334)(340)(360)(421)(440)  
 ITEM 531 SIDEWALKS (104)(360)(420)(421)(440)(530)  
 ITEM 540 METAL BEAM GUARD FENCE (421)(441)(445)(529)(542)(544)  
 ITEM 542 REMOVING METAL BEAM GUARD FENCE  
 ITEM 544 GUARDRAIL END TREATMENTS  
 ITEM 545 CRASH CUSHION ATTENUATORS (421)  
 ITEM 610 ROADWAY ILLUMINATION ASSEMBLIES (421)(441)(442)(445)(446)  
 (449)(616)(620)  
 ITEM 613 HIGH MAST ILLUMINATION POLES (421)(441)(442)(445)(449)  
 (618)  
 ITEM 614 HIGH MAST ILLUMINATION ASSEMBLIES (441)(442)(445)(446)  
 (616)(620)  
 ITEM 618 CONDUIT (400)(445)(476)(622)  
 ITEM 620 ELECTRICAL CONDUCTORS  
 ITEM 624 GROUND BOXES (420)(421)(432)(440)(618)(620)  
 ITEM 628 ELECTRICAL SERVICES (441)(445)(449)(618)(620)(627)(656)  
 ITEM 636 ALUMINUM SIGNS (643)

ITEM 644 SMALL ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (421)(440)  
 (441)(442)(445)(634)(636)(643)(656)  
 ITEM 647 LARGE ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (421)(440)  
 (441)(442)(445)(643)  
 ITEM 650 OVERHEAD SIGN SUPPORTS (416)(420)(421)(441)(442)(445)  
 (449)(618)  
 ITEM 658 DELINEATOR AND OBJECT MARKER ASSEMBLIES (445)  
 ITEM 662 WORK ZONE PAVEMENT MARKINGS (666)(668)(672)(677)  
 ITEM 666 REFLECTORIZED PAVEMENT MARKINGS (316)(318)(662)(677)(678)  
 ITEM 668 PREFABRICATED PAVEMENT MARKINGS  
 ITEM 672 RAISED PAVEMENT MARKERS (677)(678)  
 ITEM 677 ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS (300)  
 (302)(316)  
 ITEM 678 PAVEMENT SURFACE PREPARATION FOR MARKINGS (677)  
 ITEM 680 INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (610)(625)(627)  
 (634)(636)(656)  
 ITEM 682 VEHICLE AND PEDESTRIAN SIGNAL HEADS  
 ITEM 684 TRAFFIC SIGNAL CABLES  
 ITEM 686 TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (416)(421)(441)  
 (442)(445)(449)  
 ITEM 687 PEDESTAL POLE ASSEMBLIES (445)(449)(656)  
 ITEM 740 GRAFFITI REMOVAL AND ANTI-GRAFFITI COATING (427)(446)

SPECIAL PROVISIONS: SPECIAL PROVISIONS WILL GOVERN AND TAKE  
 ----- PRECEDENCE OVER THE SPECIFICATIONS ENUMERATED  
 HEREON WHEREVER IN CONFLICT THEREWITH.

REQUIRED CONTRACT PROVISIONS, FEDERAL-AID CONSTRUCTION CONTRACTS  
 (FORM FHWA 1273, MAY, 2012)

#### WAGE RATES

SPECIAL PROVISION "NOTICE TO ALL BIDDERS" (000---003)  
 SPECIAL PROVISION "NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO  
 ENSURE EQUAL EMPLOYMENT OPPORTUNITY" (000---004)  
 SPECIAL PROVISION "STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY  
 CONSTRUCTION CONTRACT SPECIFICATIONS" (000---006)  
 SPECIAL PROVISION "CERTIFICATION OF NONDISCRIMINATION IN EMPLOYMENT"  
 (000---009)  
 SPECIAL PROVISION "DEPARTMENT DIVISION MAILING AND PHYSICAL ADDRESS"  
 (000---011)  
 SPECIAL PROVISION "NOTICE OF CHANGES TO U.S. DEPARTMENT OF LABOR  
 REQUIRED PAYROLL INFORMATION" (000--1483)  
 SPECIAL PROVISION "ON-THE-JOB TRAINING PROGRAM" (000--1676)  
 SPECIAL PROVISION "DISADVANTAGED BUSINESS ENTERPRISE IN FEDERAL AID  
 CONTRACTS" (000--1966)  
 SPECIAL PROVISION "PARTNERING" (000--2329)  
 SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000--2332)  
 SPECIAL PROVISION "NONDISCRIMINATION" (000--2607)  
 SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000--2724)  
 SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000--2711)  
 SPECIAL PROVISION TO ITEM 1 (001---015)  
 SPECIAL PROVISION TO ITEM 2 (002---017)  
 SPECIAL PROVISION TO ITEM 3 (003---033)

SPECIAL PROVISION	TO ITEM	4	(004---017)
SPECIAL PROVISION	TO ITEM	5	(005---004)
SPECIAL PROVISIONS	TO ITEM	6	(006---030)(006---047)
SPECIAL PROVISIONS	TO ITEM	7	(007---918)(007---1063)
SPECIAL PROVISIONS	TO ITEM	8	(008---086)(008---119)
SPECIAL PROVISIONS	TO ITEM	9	(009---009)(009---015)
SPECIAL PROVISION	TO ITEM	100	(100---002)
SPECIAL PROVISION	TO ITEM	161	(161---006)
SPECIAL PROVISION	TO ITEM	164	(164---002)
SPECIAL PROVISION	TO ITEM	166	(166---001)
SPECIAL PROVISION	TO ITEM	247	(247---033)
SPECIAL PROVISION	TO ITEM	260	(260---003)
SPECIAL PROVISION	TO ITEM	275	(275---003)
SPECIAL PROVISIONS	TO ITEM	300	(300---039)(300---044)
SPECIAL PROVISION	TO ITEM	316	(316---016)
SPECIAL PROVISION	TO ITEM	318	(318---010)
SPECIAL PROVISION	TO ITEM	330	(330---001)
SPECIAL PROVISION	TO ITEM	340	(340---003)
SPECIAL PROVISION	TO ITEM	360	(360---003)
SPECIAL PROVISION	TO ITEM	361	(361---001)
SPECIAL PROVISION	TO ITEM	416	(416---001)
SPECIAL PROVISION	TO ITEM	420	(420---002)
SPECIAL PROVISION	TO ITEM	421	(421---035)
SPECIAL PROVISION	TO ITEM	424	(424---003)
SPECIAL PROVISION	TO ITEM	425	(425---001)
SPECIAL PROVISION	TO ITEM	429	(429---008)
SPECIAL PROVISION	TO ITEM	431	(431---001)
SPECIAL PROVISION	TO ITEM	434	(434---003)
SPECIAL PROVISION	TO ITEM	440	(440---006)
SPECIAL PROVISIONS	TO ITEM	441	(441---006)(441---008)
SPECIAL PROVISION	TO ITEM	447	(447---002)
SPECIAL PROVISION	TO ITEM	448	(448---002)
SPECIAL PROVISION	TO ITEM	450	(450---001)
SPECIAL PROVISION	TO ITEM	454	(454---003)
SPECIAL PROVISION	TO ITEM	462	(462---015)
SPECIAL PROVISION	TO ITEM	464	(464---006)
SPECIAL PROVISION	TO ITEM	465	(465---001)
SPECIAL PROVISION	TO ITEM	476	(476---003)
SPECIAL PROVISION	TO ITEM	500	(500---011)
SPECIAL PROVISION	TO ITEM	502	(502---033)
SPECIAL PROVISION	TO ITEM	508	(508---001)
SPECIAL PROVISION	TO ITEM	512	(512---002)
SPECIAL PROVISION	TO ITEM	514	(514---002)
SPECIAL PROVISION	TO ITEM	530	(530---006)
SPECIAL PROVISION	TO ITEM	540	(540---031)
SPECIAL PROVISION	TO ITEM	610	(610---015)
SPECIAL PROVISION	TO ITEM	613	(613---002)
SPECIAL PROVISION	TO ITEM	620	(620---001)
SPECIAL PROVISION	TO ITEM	624	(624---014)
SPECIAL PROVISION	TO ITEM	628	(628---003)
SPECIAL PROVISION	TO ITEM	636	(636---014)
SPECIAL PROVISION	TO ITEM	643	(643---001)
SPECIAL PROVISION	TO ITEM	672	(672---034)
SPECIAL PROVISION	TO ITEM	682	(682---003)

SPECIAL PROVISION	TO ITEM	687	(687---004)
SPECIAL PROVISION	TO ITEM	740	(740---001)
SPECIAL PROVISION	TO SPECIAL SPECIFICATION ITEM	1122	(1122--001)
SPECIAL PROVISION	TO SPECIAL SPECIFICATION ITEM	4116	(4116--001)
SPECIAL PROVISION	TO SPECIAL SPECIFICATION ITEM	6266	(6266--017)
SPECIAL PROVISION	TO SPECIAL SPECIFICATION ITEM	6834	(6834--002)

SPECIAL SPECIFICATIONS:

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ITEM 1122	TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS (161)(432)(556)
ITEM 3199	FAST TRACK CONCRETE PAVEMENT
ITEM 3267	DENSE-GRADED HOT-MIX ASPHALT (SMALL QUANTITY)
ITEM 3268	DENSE-GRADED HOT-MIX ASPHALT
ITEM 3269	PERMEABLE FRICTION COURSE (PFC)
ITEM 4116	SOIL NAIL ANCHORS
ITEM 4562	PRE-CAST TRENCH DRAIN
ITEM 5165	GEOGRID REINFORCEMENT FOR EMBANKMENTS
ITEM 5367	CABLE BARRIER SYSTEM
ITEM 6007	REMOVING TRAFFIC SIGNALS
ITEM 6011	TESTING, TRAINING, DOCUMENTATION, FINAL ACCEPTANCE AND WARRANTY
ITEM 6266	VIDEO IMAGING VEHICLE DETECTION SYSTEM
ITEM 6834	PORTABLE CHANGEABLE MESSAGE SIGN
ITEM 7642	SLIP LINING PIPE OR BOX CULVERTS (400)(401)(402)(403)(464)
ITEM 8736	REMOVE AND RELOCATE DYNAMIC MESSAGE SIGN (416)(445)(446)(618)(6011)
ITEM 8835	ACCESSIBLE PEDESTRIAN SIGNAL UNITS (618)(624)(682)(684)(688)

GENERAL: THE ABOVE-LISTED SPECIFICATION ITEMS ARE THOSE UNDER WHICH  
 ----- PAYMENT IS TO BE MADE. THESE, TOGETHER WITH SUCH OTHER  
 PERTINENT ITEMS, IF ANY, AS MAY BE REFERRED TO IN THE ABOVE-  
 LISTED SPECIFICATION ITEMS, AND INCLUDING THE SPECIAL  
 PROVISIONS LISTED ABOVE, CONSTITUTE THE COMPLETE SPECIFI-  
 CATIONS FOR THIS PROJECT.



## **SPECIAL PROVISION**

**008---086**

### **Prosecution and Progress**

For this project, Item 8 “Prosecution and Progress,” of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of the Item are waived or changed.

**Article 8.2 Progress Schedules, Section B. Construction Contracts** is voided and replaced by the following:

**B. Construction Contracts.** Before starting work on a construction Contract, prepare and submit your progress schedule based on the sequence of work and traffic control plan shown in the Contract. Prepare the progress schedule using the Critical Path Method (CPM). Include all planned work activities and sequences. Show number of working days for Contract completion using anticipated production rates, major material procurements, known utility relocations, and other activities that may affect the completion of the Contract. Show a beginning date, ending date, and duration in number of working days for each activity. Do not use activities exceeding 20 working days, except for agreed upon activities. Show an anticipated production rate per working day for each work activity.

Create and maintain the CPM schedule using computer software fully compatible with version 3.1 of Primavera Systems, Inc., Primavera Project Planner (P3), or SureTrak Project Scheduler. If using SureTrak Project Scheduler, save the schedule in Primavera format setting activities as tasks and durations in days.

- 1. Personnel.** Provide a person proficient in CPM analysis to create and maintain the project schedule and to be available when requested.
- 2. Project Schedule.** Format the project schedule according to the following:
  - Begin the project schedule on the date of the start of Contract time or start of activities affecting compensable work on the project, whichever occurs first;
  - Show the sequence and interdependence of activities required for complete performance of the work;
  - Ensure all work sequences are logical and show a coordinated plan of the work;
  - Show a predecessor and successor for each activity;
  - Clearly and accurately identify the critical path as the longest continuous path;
  - Provide a legend for all abbreviations and include the schedule filename, run date, data date, project start date, and project completion date in the title block of each schedule submittal, and;

- Through the use of calendars, incorporate seasonal weather conditions into the schedule for work (e.g., earthwork, concrete paving, structures, asphalt, drainage, etc.) that may be influenced by temperature or precipitation. Also, incorporate non-work periods such as holidays, weekends, or other non-work days as identified in the Contract.

For each activity on the project schedule provide:

- a logical activity number utilizing an alphanumeric designation system tied to the sequence of work and traffic control plans;
- a concise description of the work represented by the activity;
- an activity duration in whole working days;
- calculated activity durations by dividing the quantity of work for each individual activity by the estimated production rate;
- the quantity of work and estimated production rate for each activity; and,
- Coded activities so that organized plots of the schedule may be produced.

Total float is the amount of time between the early start date and the late start date, or the early finish date and the late finish date, whichever is least, for each activity in the schedule. Total float is a shared commodity between the Department and the Contractor.

**a. Preliminary Schedule.** Seven days prior to the preconstruction meeting, submit both plotted and electronic copies of the project schedule showing work to be performed in the first 90 calendar days of the project. Submit the electronic backup copy saved in Primavera format on a computer disc.

**b. Baseline Schedule.** The baseline schedule will be considered the Contractor's plan to successfully construct the project within the timeframe and construction sequencing indicated in the Contract. Prior to the first monthly estimate after the start of Contract time or start of compensable work, whichever occurs first, submit the baseline schedule showing all activities required to complete the entire Contract. Submit both plotted and electronic copies of the baseline schedule. Submit two plots of the schedule, one organized with the activities logically grouped using the activity coding; and, the other plot showing only the critical path determined by the longest path, not based on critical float. Show the following on both plots:

- Activity number;
- Activity description;
- Quantity of work;
- Original duration;
- Early start;

- Early finish;
- Total float;
- Show Activity bars and timescale; and
- Legend showing the data listed above.

Create layouts for both of the plots in the electronic copy and submit an electronic backup copy saved on computer disc.

- c. **Review.** Within 15 calendar days of receipt of the baseline schedule, the Engineer will evaluate the schedule for compliance with this specification, and inform the Contractor if the schedule is acceptable. If the schedule is unacceptable, the Engineer will provide reasons for the unacceptability. If the schedule is found unacceptable, provide a revision, correction, or reasons for not doing so within five calendar days. The Engineer's review and acceptance of the project schedule is for conformance to the requirements of the Contract documents only and does not relieve the Contractor of any responsibility for meeting the interim milestone dates (if specified) or the Contract completion date. Review and acceptance does not expressly or by implication warrant, acknowledge, or admit the reasonableness of the logic or durations of the project schedule. If the Contractor fails to define any element of work, activity, or logic and the Engineer's review does not detect this omission or error, the Contractor is responsible for correcting the error or omission in the next monthly schedule update.

If the baseline schedule is found to not comply with this specification, the Engineer may withhold payment of estimates until compliance is achieved.

3. **Maintenance, Revision, and Updating of the Project Schedule.** The project schedule will be maintained for use by both the Contractor and the Engineer. It will become an as-built record of the daily progress achieved on the project. In order to maintain an accurate as-built record of each activity, actual start date, actual finish dates, actual quantity placement, and actual production rates must be recorded in the project schedule when they occur. If continuous progress of an activity is interrupted for any reason except non-work periods (such as holidays, weekend, or interference from temperature or precipitation), then the activity will show the actual finish date as that date of the start of the interruption and the activity will be broken into a subsequent activity (or activities, based on the number of interruptions) similarly numbered with successive alpha character as necessary. The original duration of the subsequent activity will be that of the remaining duration of the original activity. Relationships of the subsequent activity will match those of the original activity so that the integrity of the project schedule logic is maintained. Once established the original durations and actual dates of all activities must remain unchanged.

Revisions to the schedule may be made as necessary. The project schedule shall be revised when changes in construction phasing and sequencing, changes in the Traffic Control Plan, or other changes that cause deviation from the original project schedule occur. Any revisions to the schedule must be listed in the monthly update narrative with the purpose of the revision and description of the impact on the project schedule's critical

path and project completion date. Submit an electronic backup of the schedule that includes the revision. Create the schedule revision using the latest update before the start of the revision.

Monthly updating of the project schedule shall include updating of:

- the actual start dates for activities started;
- the actual finish dates for activities completed;
- the quantity of work completed and remaining duration for each activity started but not yet completed; and
- the calendars to show days actual work was performed on the various work activities.

The cut-off day for recording monthly progress will be the 25<sup>th</sup> of each month. Submit the updated project schedule no later than the 5<sup>th</sup> calendar day of the following month. The Engineer will evaluate the updated schedule for compliance with this specification within 5 calendar days of receipt and inform the Contractor if the schedule is acceptable. If the schedule is unacceptable, the Engineer will provide reasons for the unacceptability. If the schedule is found unacceptable, provide a revision, correction, or reasons for not doing so within 5 calendar days. Submit the following information:

- one electronic backup of the schedule after update changes and after recalculating the schedule;
- notice to the Engineer if resource-leveling is being used;
- two logically organized plots (as outlined for the baseline schedule) of the schedule update, labeled with the time period represented, and showing accurately updated data regarding all items listed above;
- a monthly update narrative that includes an explanation of project progress for the period represented, which includes: 1.) a report (on a form provided by the Department) showing the status of the project completion date and listing the reasons why any change may have occurred; 2.) a list of all activities that have been added, deleted, or otherwise changed in the schedule with explanations for the modifications and description of the impacts each has on the project schedule; 3.) any revisions that may have been performed to the schedule, providing the purpose of the revision and description of the impact to the project critical path and completion dates; and, 4.) the status of the critical path, explaining reasons for any changes in critical path, impacts to the critical path that occurred during the period represented, or identifying any potential impacts that are apparent to occur within the following 3 months, including but not limited to material deliveries, utility and right of way clearances, or other potential impacts; and,
- other detailed schedule information as required by plan note.

If the schedule updates and narrative are not submitted by the 5<sup>th</sup> calendar day of the following month, the Engineer may withhold estimate payments until an update complying with this specification is submitted.

- 4. Notice of Potential Time Impact.** Submit a “Notice of Potential Time Impact” when a Contract time extension or adjustment of milestone dates may be justified. If the potential impact is identified between schedule updates, submit this notice no later than 5 calendar days after the start of the impact. If the potential impact is identified as a result of the updating process, submit this notice with the schedule update.

Failure to provide this notice in the timeframes outlined above will compromise the Department’s ability to mitigate the impacts and the Contractor forfeits the right to request a time extension or adjustment of milestone dates unless the circumstances are such that the Contractor could not reasonably have had knowledge of the impact at the time.

- 5. Time Impact Analysis.** A time impact analysis is an evaluation of the effects of impacts on the project. A time impact analysis consists of the following steps:

Step 1. Establish the status of the project immediately before the impact.

Step 2. Predict the effect of the impact on the schedule update used in Step 1.

Step 3. Track the effects of the impact on the schedule during its occurrence.

Step 4. Establish the status of the project after the impact is complete and provide details identifying any mitigating actions or circumstances used to keep the project ongoing during the impact period.

Submit Step 1 and Step 2, if requested by the Department, with the “Notice of Potential Time Impact.” Incorporate Step 3 into schedule updates until the impact is complete. Submit Step 4 no later than 15 calendar days after the completion of an impact.

Determine the time impact by comparing the status of the work prior to the impact (Step 1) to the prediction of the effect of the impact (Step 2), if requested, and to actual effects of the impact once it is complete (Step 4). Unless otherwise approved by the Engineer, steps 1, 3, and 4, shall be completed before consideration of a Contract time extension or adjustment of a milestone date will be provided. Time extensions will only be considered when delays that affect milestone dates or the Contract completion date are beyond the Contractor’s control.

Submit one electronic backup copy of the complete time impact analysis and a copy of the full project schedule incorporating the time impact analysis. If the project schedule is revised after the submittal of a time impact analysis, but prior to its approval, indicate in writing the need for any modification to the time impact analysis.

The Engineer will review the time impact analysis upon completion of step 4 of the time impact analysis. If this review detects revisions or changes to the schedule that had not been performed and identified in a narrative, the Engineer may reject the time impact analysis. If the Engineer is in agreement with the time impact analysis, a change order may be issued to grant additional working days, or to adjust interim milestones. Once a change order has been executed, incorporate the time impact analysis into the project schedule. The time impact analysis may also be used to support the settlement of delay and inefficiency disputes and claims; however, compensation of such delays or inefficiencies related to the time impact analysis may not be provided until completion of

the project and determination can be made regarding the true role the impact played on the final completion of the project following subsequent actions that may have been allowed or enacted to minimize impacts of time or cost.

No direct compensation will be made for fulfilling these requirements, as this work is considered subsidiary to the Items of the Contract.

## **SPECIAL PROVISION**

### **361---001**

#### **Full-Depth Repair of Concrete Pavement**

For this project, Item 361, “Full-Depth Repair of Concrete Pavement,” of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

**Article 361.2. Materials** is supplemented by the following:

- Item 438, “Cleaning and Sealing Joints and Cracks (Rigid Pavement and Bridge Decks)”
- DMS 6310, “Joint Sealants and Fillers”

**Article 361.3. Construction.** The second paragraph is voided and replaced by the following:

Remove or repair loose or damaged base material, and replace or repair it with approved base material to the original top of base grade. Place at least 1 in. of asphalt concrete or a polyethylene sheet at least 4 mils thick as a bond breaker at the interface of the base and the new pavement. Allow concrete used as a base material to attain sufficient strength to prevent displacement when placing pavement concrete.

**Article 361.3. Construction.** The fifth paragraph is voided and replaced by the following:

Cure repaired area for at least 72 hr. or until overlaid with asphalt concrete, if required, or until the area is opened to traffic. For repair areas to be opened to traffic before 72 hr.:

- Use curing mats to maintain a minimum concrete surface temperature of 70°F when the air temperature is less than 70°F.
- The Engineer may waive the requirements of Section 360.4.G.4, “Temperature Restrictions,” but the repair areas must then be cured using wet curing mats.

Saw and seal contraction joints in the repair area in accordance with Item 360, “Concrete Pavement.” Remove repair area debris from the right of way each day.

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